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ANSWER 1 OF 168 REGISTRY COPYRIGHT 2002 ACS L5

RN 382620-25-9 REGISTRY

1H-Purine-2,6-dione, 3-[(4-chlorophenyl)methyl]-3,7-dihydro-7-methyl-8-(1-CN piperazinyl) - (9CI) (CA INDEX NAME)

FS 3D CONCORD

MF C17 H19 C1 N6 O2

SR Chemical Library

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L5 ANSWER 2 OF 168 REGISTRY COPYRIGHT 2002 ACS

RN 378217-46-0 REGISTRY

CN 7H-Purine-7-acetamide, 1,2,3,6-tetrahydro-3-methyl-8-(4-methyl-1-piperazinyl)-2,6-dioxo- (9CI) (CA INDEX NAME)

FS 3D CONCORD

MF C13 H19 N7 O3

SR Chemical Library

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L5 ANSWER 3 OF 168 REGISTRY COPYRIGHT 2002 ACS

RN 378209-44-0 REGISTRY

CN 1H-Purine-2,6-dione, 3,7-dihydro-7-(2-hydroxyethyl)-1,3-dimethyl-8-(4-methyl-1-piperazinyl)- (9CI) (CA INDEX NAME)

FS 3D CONCORD

MF C14 H22 N6 O3

SR Chemical Library

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L5 ANSWER 4 OF 168 REGISTRY COPYRIGHT 2002 ACS

RN 378206-26-9 REGISTRY

CN 7H-Purine-7-acetamide, 1,2,3,6-tetrahydro-1,3-dimethyl-8-(4-methyl-1-piperazinyl)-2,6-dioxo- (9CI) (CA INDEX NAME)

FS 3D CONCORD

MF C14 H21 N7 O3

SR Chemical Library

L5 ANSWER 5 OF 168 REGISTRY COPYRIGHT 2002 ACS

RN 378205-13-1 REGISTRY

CN 1H-Purine-2,6-dione, 7-[2-(4-bromophenyl)-2-oxoethyl]-3,7-dihydro-1,3-dimethyl-8-(4-methyl-1-piperazinyl)- (9CI) (CA INDEX NAME)

FS 3D CONCORD

MF C20 H23 Br N6 O3

SR Chemical Library

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L5 ANSWER 6 OF 168 REGISTRY COPYRIGHT 2002 ACS

RN 377063-97-3 REGISTRY

CN 7H-Purine-7-acetamide, 1,2,3,6-tetrahydro-1,3-dimethyl-2,6-dioxo-8-(1-piperazinyl)- (9CI) (CA INDEX NAME)

FS 3D CONCORD

MF C13 H19 N7 O3

SR Chemical Library

Me NH NH NH NH NH
$$\sim$$
 CH₂-C-NH₂

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L5 ANSWER 7 OF 168 REGISTRY COPYRIGHT 2002 ACS

RN 377058-48-5 REGISTRY

CN 1H-Purine-2,6-dione, 3,7-dihydro-7-(2-methoxyethyl)-1,3-dimethyl-8-(4-methyl-1-piperazinyl)- (9CI) (CA INDEX NAME)

FS 3D CONCORD

8

MF C15 H24 N6 O3

SR Chemical Library

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L5 ANSWER 8 OF 168 REGISTRY COPYRIGHT 2002 ACS

RN 377057-95-9 REGISTRY

CN 1H-Purine-2,6-dione, 3,7-dihydro-1,3-dimethyl-8-(4-methyl-1-piperazinyl)-7-(2-propenyl)- (9CI) (CA INDEX NAME)

FS 3D CONCORD

MF C15 H22 N6 O2

SR Chemical Library

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L5 ANSWER 9 OF 168 REGISTRY COPYRIGHT 2002 ACS

RN 376624-10-1 REGISTRY

CN INDEX NAME NOT YET ASSIGNED

FS 3D CONCORD

MF C14 H20 N6 O2

SR Chemical Library

L5 ANSWER 10 OF 168 REGISTRY COPYRIGHT 2002 ACS

RN 376621-43-1 REGISTRY

CN INDEX NAME NOT YET ASSIGNED

FS 3D CONCORD

3

MF C23 H29 N7 O4

SR Chemical Library

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L5 ANSWER 11 OF 168 REGISTRY COPYRIGHT 2002 ACS

RN 374612-08-5 REGISTRY

CN 1H-Purine-2,6-dione, 7-[(2-chlorophenyl)methyl]-3,7-dihydro-1,3-dimethyl-8-(1-piperazinyl)- (9CI) (CA INDEX NAME)

MF C18 H21 C1 N6 O2

SR Chemical Library

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L5 ANSWER 12 OF 168 REGISTRY COPYRIGHT 2002 ACS

RN 371927-37-6 REGISTRY

CN 1H-Purine-2,6-dione, 7-hexyl-3,7-dihydro-3-methyl-8-(1-piperazinyl)- (9CI) (CA INDEX NAME)

FS 3D CONCORD

MF C16 H26 N6 O2

SR Chemical Library

L5 ANSWER 13 OF 168 REGISTRY COPYRIGHT 2002 ACS

RN 368432-84-2 REGISTRY

CN 1H-Purine-2,6-dione, 3,7-dihydro-3-methyl-7-(2-phenoxyethyl)-8-(1-piperazinyl)- (9CI) (CA INDEX NAME)

FS 3D CONCORD

MF C18 H22 N6 O3

SR Chemical Library

$$\begin{array}{c|c}
Me & NH \\
NN & NH \\
NN & CH_2-CH_2-OPh
\end{array}$$

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L5 ANSWER 14 OF 168 REGISTRY COPYRIGHT 2002 ACS

RN 364371-37-9 REGISTRY

CN 1H-Purine-2,6-dione, 3,7-dihydro-7-[2-hydroxy-3-(2,4,6-tribromophenoxy)propyl]-3-methyl-8-(4-methyl-1-piperazinyl)- (9CI) (CA INDEX NAME)

FS 3D CONCORD

MF C20 H23 Br3 N6 O4

SR Chemical Library

LC STN Files: CHEMCATS

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L5 ANSWER 15 OF 168 REGISTRY COPYRIGHT 2002 ACS

RN 361174-74-5 REGISTRY

CN 1H-Purine-2,6-dione, 3,7-dihydro-3-methyl-7-[(3-methylphenyl)methyl]-8-(4-methyl-1-piperazinyl)- (9CI) (CA INDEX NAME)

FS 3D CONCORD

MF C19 H24 N6 O2

SR Chemical Library

LC STN Files: CHEMCATS

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L5 ANSWER 16 OF 168 REGISTRY COPYRIGHT 2002 ACS

RN 359909-06-1 REGISTRY

CN 1H-Purine-2,6-dione, 7-[(2,6-dichlorophenyl)methyl]-3,7-dihydro-1,3-dimethyl-8-(4-methyl-1-piperazinyl)- (9CI) (CA INDEX NAME)

MF C19 H22 C12 N6 O2

SR Chemical Library

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L5 ANSWER 17 OF 168 REGISTRY COPYRIGHT 2002 ACS

RN 359908-69-3 REGISTRY

CN 1H-Purine-2,6-dione, 7-[(3,4-dichlorophenyl)methyl]-3,7-dihydro-1,3-dimethyl-8-(4-methyl-1-piperazinyl)- (9CI) (CA INDEX NAME)

FS 3D CONCORD

MF C19 H22 C12 N6 O2

SR Chemical Library

L5 ANSWER 18 OF 168 REGISTRY COPYRIGHT 2002 ACS

RN 359908-14-8 REGISTRY

CN 1H-Purine-2,6-dione, 7-[(2,4-dichlorophenyl)methyl]-3,7-dihydro-1,3-dimethyl-8-(4-methyl-1-piperazinyl)- (9CI) (CA INDEX NAME)

MF C19 H22 C12 N6 O2

SR Chemical Library

$$\begin{array}{c|c} Me & Me \\ \hline 0 & N & N \\ \hline N & N & CH_2 \\ \hline Me & C1 \\ \hline \end{array}$$

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L5 ANSWER 19 OF 168 REGISTRY COPYRIGHT 2002 ACS

RN 359907-82-7 REGISTRY

CN 1H-Purine-2,6-dione, 7-[(4-bromophenyl)methyl]-3,7-dihydro-1,3-dimethyl-8-(4-methyl-1-piperazinyl)- (9CI) (CA INDEX NAME)

FS 3D CONCORD

MF C19 H23 Br N6 O2

SR Chemical Library

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L5 ANSWER 20 OF 168 REGISTRY COPYRIGHT 2002 ACS

RN 359904-67-9 REGISTRY

CN 1H-Purine-2,6-dione, 7-[(2-bromophenyl)methyl]-3,7-dihydro-1,3-dimethyl-8-(4-methyl-1-piperazinyl)- (9CI) (CA INDEX NAME)

MF C19 H23 Br N6 O2

SR Chemical Library

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L5 ANSWER 21 OF 168 REGISTRY COPYRIGHT 2002 ACS

RN 359903-52-9 REGISTRY

CN 1H-Purine-2,6-dione, 7-[(2-fluorophenyl)methyl]-3,7-dihydro-1,3-dimethyl-8-(4-methyl-1-piperazinyl)- (9CI) (CA INDEX NAME)

MF C19 H23 F N6 O2

SR Chemical Library

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L5 ANSWER 22 OF 168 REGISTRY COPYRIGHT 2002 ACS

RN 359902-95-7 REGISTRY

CN lH-Purine-2,6-dione, 7-[(3-chlorophenyl)methyl]-3,7-dihydro-1,3-dimethyl-8-(4-methyl-1-piperazinyl)- (9CI) (CA INDEX NAME)

FS 3D CONCORD

MF C19 H23 C1 N6 O2

SR Chemical Library

$$\begin{array}{c|c} Me & Me \\ \hline 0 & N & N \\ \hline N & CH_2 \\ \hline \end{array}$$

L5 ANSWER 23 OF 168 REGISTRY COPYRIGHT 2002 ACS

RN 359902-76-4 REGISTRY

CN 1H-Purine-2,6-dione, 7-[(2-chlorophenyl)methyl]-3,7-dihydro-1,3-dimethyl-8-(4-methyl-1-piperazinyl)- (9CI) (CA INDEX NAME)

MF C19 H23 C1 N6 O2

SR Chemical Library

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L5 ANSWER 24 OF 168 REGISTRY COPYRIGHT 2002 ACS

RN 359902-48-0 REGISTRY

CN 1H-Purine-2,6-dione, 3,7-dihydro-7-[(4-methoxyphenyl)methyl]-1,3-dimethyl-8-(4-methyl-1-piperazinyl)- (9CI) (CA INDEX NAME)

FS 3D CONCORD

MF C20 H26 N6 O3

SR Chemical Library

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L5 ANSWER 25 OF 168 REGISTRY COPYRIGHT 2002 ACS

RN 359902-17-3 REGISTRY

CN 1H-Purine-2,6-dione, 7-[(2,4-dimethylphenyl)methyl]-3,7-dihydro-1,3-dimethyl-8-(4-methyl-1-piperazinyl)- (9CI) (CA INDEX NAME)

FS 3D CONCORD

MF C21 H28 N6 O2

SR Chemical Library

- L5 ANSWER 26 OF 168 REGISTRY COPYRIGHT 2002 ACS
- RN 359901-61-4 REGISTRY
- CN 1H-Purine-2,6-dione, 3,7-dihydro-1,3-dimethyl-7-[(3-methylphenyl)methyl]-8-(4-methyl-1-piperazinyl)- (9CI) (CA INDEX NAME)
- FS 3D CONCORD
- MF C20 H26 N6 O2
- SR Chemical Library
- LC STN Files: CHEMCATS

$$\begin{array}{c|c} Me & Me \\ \hline 0 & N & N \\ \hline N & N & CH_2 \\ \hline \end{array}$$

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

- L5 ANSWER 27 OF 168 REGISTRY COPYRIGHT 2002 ACS
- RN 359698-07-0 REGISTRY
- CN 1H-Purine-2,6-dione, 3,7-dihydro-1,3-dimethyl-7-[(2-methylphenyl)methyl]-8-(4-methyl-1-piperazinyl)- (9CI) (CA INDEX NAME)
- FS 3D CONCORD
- MF C20 H26 N6 O2
- SR Chemical Library
- LC STN Files: CHEMCATS

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L5 ANSWER 28 OF 168 REGISTRY COPYRIGHT 2002 ACS

RN 353255-08-0 REGISTRY

CN 1H-Purine-2,6-dione, 3,7-dihydro-3-methyl-7-(3-phenylpropyl)-8-(1-piperazinyl)- (9CI) (CA INDEX NAME)

FS 3D CONCORD

MF C19 H24 N6 O2

SR Chemical Library

LC STN Files: CHEMCATS

$$\begin{array}{c|c}
Me \\
N \\
N \\
N
\end{array}$$

$$\begin{array}{c|c}
NH \\
N \\
N \\
CH_2)_3-Ph
\end{array}$$

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L5 ANSWER 29 OF 168 REGISTRY COPYRIGHT 2002 ACS

RN 335403-41-3 REGISTRY

CN 1H-Purine-2,6-dione, 3,7-dihydro-1,3-dimethyl-7-(1-methylethyl)-8-(4-methyl-1-piperazinyl)- (9CI) (CA INDEX NAME)

FS 3D CONCORD

MF C15 H24 N6 O2

SR Chemical Library

LC STN Files: CHEMCATS

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L5 ANSWER 30 OF 168 REGISTRY COPYRIGHT 2002 ACS

RN 335403-14-0 REGISTRY

CN 1H-Purine-2,6-dione, 7-[3-(4-ethylphenoxy)-2-hydroxypropyl]-3,7-dihydro-3-methyl-8-(4-methyl-1-piperazinyl)- (9CI) (CA INDEX NAME)

FS 3D CONCORD

MF C22 H30 N6 O4

SR Chemical Library

- L5 ANSWER 31 OF 168 REGISTRY COPYRIGHT 2002 ACS
- RN 335403-13-9 REGISTRY
- CN 1H-Purine-2,6-dione, 7-[3-(4-ethylphenoxy)-2-hydroxypropyl]-3,7-dihydro-3-methyl-8-(1-piperazinyl)- (9CI) (CA INDEX NAME)
- FS 3D CONCORD
- MF C21 H28 N6 O4
- SR Chemical Library
- LC STN Files: CHEMCATS

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

- L5 ANSWER 32 OF 168 REGISTRY COPYRIGHT 2002 ACS
- RN 333755-40-1 REGISTRY
- CN 1H-Purine-2,6-dione, 3,7-dihydro-7-[2-hydroxy-3-(4-methoxyphenoxy)propyl]-1,3-dimethyl-8-(4-methyl-1-piperazinyl)- (9CI) (CA INDEX NAME)
- FS 3D CONCORD
- MF C22 H30 N6 O5
- SR Chemical Library
- LC STN Files: CHEMCATS

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L5 ANSWER 33 OF 168 REGISTRY COPYRIGHT 2002 ACS

RN 333755-39-8 REGISTRY

CN 1H-Purine-2,6-dione, 3,7-dihydro-7-[2-hydroxy-3-(4-methoxyphenoxy)propyl]-1,3-dimethyl-8-(1-piperazinyl)- (9CI) (CA INDEX NAME)

FS 3D CONCORD

MF C21 H28 N6 O5

SR Chemical Library

LC STN Files: CHEMCATS

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L5 ANSWER 34 OF 168 REGISTRY COPYRIGHT 2002 ACS

RN 333755-23-0 REGISTRY

CN 1H-Purine-2,6-dione, 7-[(4-fluorophenyl)methyl]-3,7-dihydro-1,3-dimethyl-8-(4-methyl-1-piperazinyl)- (9CI) (CA INDEX NAME)

FS 3D CONCORD

MF C19 H23 F N6 O2

SR Chemical Library

LC STN Files: CHEMCATS

$$\begin{array}{c|c} Me & Me \\ \hline N & N & N \\ \hline N & CH_2 \\ \hline \end{array}$$

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L5 ANSWER 35 OF 168 REGISTRY COPYRIGHT 2002 ACS

RN 333755-22-9 REGISTRY

CN 1H-Purine-2,6-dione, 7-[(4-fluorophenyl)methyl]-3,7-dihydro-1,3-dimethyl-8-(1-piperazinyl)- (9CI) (CA INDEX NAME)

FS 3D CONCORD

MF C18 H21 F N6 O2

SR Chemical Library

L5 ANSWER 36 OF 168 REGISTRY COPYRIGHT 2002 ACS

RN 333305-43-4 REGISTRY

CN 1H-Purine-2,6-dione, 7-[3-(4-chlorophenoxy)-2-hydroxypropyl]-3,7-dihydro-1,3-dimethyl-8-(4-methyl-1-piperazinyl)- (9CI) (CA INDEX NAME)

FS 3D CONCORD

MF C21 H27 C1 N6 O4

SR Chemical Library

LC STN Files: CHEMCATS

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

- L5 ANSWER 37 OF 168 REGISTRY COPYRIGHT 2002 ACS
- RN 333305-42-3 REGISTRY
- CN 1H-Purine-2,6-dione, 7-[3-(4-chlorophenoxy)-2-hydroxypropyl]-3,7-dihydro-1,3-dimethyl-8-(1-piperazinyl)- (9CI) (CA INDEX NAME)
- FS 3D CONCORD
- MF C20 H25 C1 N6 O4
- SR Chemical Library
- LC STN Files: CHEMCATS

$$\begin{array}{c|c} Me & NH \\ NN & NH \\ NMe & N \\ NMe & N \\ \end{array}$$

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L5 ANSWER 38 OF 168 REGISTRY COPYRIGHT 2002 ACS

RN 333305-37-6 REGISTRY

CN 1H-Purine-2,6-dione, 3,7-dihydro-7-[2-hydroxy-3-(2-methylphenoxy)propyl]-1,3-dimethyl-8-(4-methyl-1-piperazinyl)- (9CI) (CA INDEX NAME)

FS 3D CONCORD

MF C22 H30 N6 O4

SR Chemical Library

LC STN Files: CHEMCATS

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L5 ANSWER 39 OF 168 REGISTRY COPYRIGHT 2002 ACS

RN 333305-36-5 REGISTRY

CN 1H-Purine-2,6-dione, 3,7-dihydro-7-[2-hydroxy-3-(2-methylphenoxy)propyl]-1,3-dimethyl-8-(1-piperazinyl)- (9CI) (CA INDEX NAME)

FS 3D CONCORD

MF C21 H28 N6 O4

SR Chemical Library

LC STN Files: CHEMCATS

Me NH OH Me NH
$$CH_2-CH-CH_2-O$$

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L5 ANSWER 40 OF 168 REGISTRY COPYRIGHT 2002 ACS

RN 333305-27-4 REGISTRY

CN 1H-Purine-2,6-dione, 7-[3-(4-ethylphenoxy)-2-hydroxypropyl]-3,7-dihydro-1,3-dimethyl-8-(1-piperazinyl)- (9CI) (CA INDEX NAME)

FS 3D CONCORD

MF C22 H30 N6 O4

SR Chemical Library

- L5 ANSWER 41 OF 168 REGISTRY COPYRIGHT 2002 ACS
- RN 333305-06-9 REGISTRY
- CN 1H-Purine-2,6-dione, 3,7-dihydro-1,3-dimethyl-8-(4-methyl-1-piperazinyl)-7-(2-phenylethyl)- (9CI) (CA INDEX NAME)
- FS 3D CONCORD
- MF C20 H26 N6 O2
- SR Chemical Library
- LC STN Files: CHEMCATS

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

- L5 ANSWER 42 OF 168 REGISTRY COPYRIGHT 2002 ACS
- RN 333305-05-8 REGISTRY
- CN 1H-Purine-2,6-dione, 3,7-dihydro-1,3-dimethyl-7-(2-phenylethyl)-8-(1-piperazinyl)- (9CI) (CA INDEX NAME)
- FS 3D CONCORD
- MF C19 H24 N6 O2
- SR Chemical Library
- LC STN Files: CHEMCATS

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L5 ANSWER 43 OF 168 REGISTRY COPYRIGHT 2002 ACS

RN 332905-08-5 REGISTRY

CN 1H-Purine-2,6-dione, 3,7-dihydro-3-methyl-7-[(4-methylphenyl)methyl]-8-(1-piperazinyl)- (9CI) (CA INDEX NAME)

FS 3D CONCORD

MF C18 H22 N6 O2

SR Chemical Library

LC STN Files: CHEMCATS

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L5 ANSWER 44 OF 168 REGISTRY COPYRIGHT 2002 ACS

RN 332904-83-3 REGISTRY

CN 1H-Purine-2,6-dione, 7-[3-(4-chlorophenoxy)-2-hydroxypropyl]-3,7-dihydro-3-methyl-8-(4-methyl-1-piperazinyl)- (9CI) (CA INDEX NAME)

FS 3D CONCORD

MF C20 H25 C1 N6 O4

SR Chemical Library

LC STN Files: CHEMCATS

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L5 ANSWER 45 OF 168 REGISTRY COPYRIGHT 2002 ACS

RN 332904-77-5 REGISTRY

CN 1H-Purine-2,6-dione, 3,7-dihydro-1,3-dimethyl-7-[(4-methylphenyl)methyl]-8-(4-methyl-1-piperazinyl)- (9CI) (CA INDEX NAME)

FS 3D CONCORD

MF C20 H26 N6 O2

SR Chemical Library

- L5 ANSWER 46 OF 168 REGISTRY COPYRIGHT 2002 ACS
- RN 332904-76-4 REGISTRY
- CN 1H-Purine-2,6-dione, 3,7-dihydro-1,3-dimethyl-7-[(4-methylphenyl)methyl]-8-(1-piperazinyl)- (9CI) (CA INDEX NAME)
- FS 3D CONCORD
- MF C19 H24 N6 O2
- SR Chemical Library
- LC STN Files: CHEMCATS

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

- L5 ANSWER 47 OF 168 REGISTRY COPYRIGHT 2002 ACS
- RN 332897-97-9 REGISTRY
- CN 1H-Purine-2,6-dione, 7-(3-chloro-2-butenyl)-3,7-dihydro-1,3-dimethyl-8-(4-methyl-1-piperazinyl)- (9CI) (CA INDEX NAME)
- FS 3D CONCORD
- MF C16 H23 C1 N6 O2
- SR Chemical Library
- LC STN Files: CHEMCATS

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L5 ANSWER 48 OF 168 REGISTRY COPYRIGHT 2002 ACS

RN 332897-96-8 REGISTRY

CN 1H-Purine-2,6-dione, 7-(3-chloro-2-butenyl)-3,7-dihydro-3-methyl-8-(4-methyl-1-piperazinyl)- (9CI) (CA INDEX NAME)

FS 3D CONCORD

MF C15 H21 C1 N6 O2

SR Chemical Library

LC STN Files: CHEMCATS

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L5 ANSWER 49 OF 168 REGISTRY COPYRIGHT 2002 ACS

RN 332384-43-7 REGISTRY

CN 7H-Purine-7-acetic acid, 1,2,3,6-tetrahydro-3-methyl-8-(4-methyl-1-piperazinyl)-2,6-dioxo-, pentyl ester (9CI) (CA INDEX NAME)

FS 3D CONCORD

MF C18 H28 N6 O4

SR Chemical Library

LC STN Files: CHEMCATS

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L5 ANSWER 50 OF 168 REGISTRY COPYRIGHT 2002 ACS

RN 332384-42-6 REGISTRY

CN 1H-Purine-2,6-dione, 3,7-dihydro-7-[2-hydroxy-3-(4-methoxyphenoxy)propyl]-3-methyl-8-(4-methyl-1-piperazinyl)- (9CI) (CA INDEX NAME)

FS 3D CONCORD

MF C21 H28 N6 O5

SR Chemical Library

- L5 ANSWER 51 OF 168 REGISTRY COPYRIGHT 2002 ACS
- RN 332384-40-4 REGISTRY
- CN 1H-Purine-2,6-dione, 3,7-dihydro-7-[2-hydroxy-3-(1-methylethoxy)propyl]-3-methyl-8-(1-piperazinyl)- (9CI) (CA INDEX NAME)
- FS 3D CONCORD
- MF C16 H26 N6 O4
- SR Chemical Library
- LC STN Files: CHEMCATS

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

- L5 ANSWER 52 OF 168 REGISTRY COPYRIGHT 2002 ACS
- RN 332384-28-8 REGISTRY
- CN 1H-Purine-2,6-dione, 3,7-dihydro-3-methyl-8-(4-methyl-1-piperazinyl)-7-(2-oxo-2-phenylethyl)- (9CI) (CA INDEX NAME)
- FS 3D CONCORD
- MF C19 H22 N6 O3
- SR Chemical Library
- LC STN Files: CHEMCATS

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L5 ANSWER 53 OF 168 REGISTRY COPYRIGHT 2002 ACS

RN 332151-03-8 REGISTRY

CN 1H-Purine-1-acetamide, 2,3,6,7-tetrahydro-3-methyl-7-(3-methylbutyl)-2,6-dioxo-8-(1-piperazinyl)- (9CI) (CA INDEX NAME)

FS 3D CONCORD

MF C17 H27 N7 O3

SR Chemical Library

LC STN Files: CHEMCATS

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L5 ANSWER 54 OF 168 REGISTRY COPYRIGHT 2002 ACS

RN 332103-78-3 REGISTRY

CN 1H-Purine-2,6-dione, 3,7-dihydro-1,3-dimethyl-7-(1-methyl-2-oxopropyl)-8-(4-methyl-1-piperazinyl)- (9CI) (CA INDEX NAME)

FS 3D CONCORD

MF C16 H24 N6 O3

SR Chemical Library

LC STN Files: CHEMCATS

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L5 ANSWER 55 OF 168 REGISTRY COPYRIGHT 2002 ACS

RN 332103-77-2 REGISTRY

CN 1H-Purine-2,6-dione, 3,7-dihydro-3-methyl-7-(1-methyl-2-oxopropyl)-8-(4-methyl-1-piperazinyl)- (9CI) (CA INDEX NAME)

FS 3D CONCORD

MF C15 H22 N6 O3

SR Chemical Library

L5 ANSWER 56 OF 168 REGISTRY COPYRIGHT 2002 ACS

RN 332103-75-0 REGISTRY

CN 1H-Purine-2,6-dione, 7-[3-(4-bromophenoxy)-2-hydroxypropyl]-3,7-dihydro-3-methyl-8-(4-methyl-1-piperazinyl)- (9CI) (CA INDEX NAME)

FS 3D CONCORD

MF C20 H25 Br N6 O4

SR Chemical Library

LC STN Files: CHEMCATS

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L5 ANSWER 57 OF 168 REGISTRY COPYRIGHT 2002 ACS

RN 332103-66-9 REGISTRY

CN 1H-Purine-2,6-dione, 3,7-dihydro-3-methyl-8-(4-methyl-1-piperazinyl)-7-[(4-nitrophenyl)methyl]- (9CI) (CA INDEX NAME)

FS 3D CONCORD

MF C18 H21 N7 O4

SR Chemical Library

LC STN Files: CHEMCATS

$$\begin{array}{c|c} Me & Me \\ \hline N & N & N \\ \hline N & N & CH_2 \\ \hline \end{array}$$

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L5 ANSWER 58 OF 168 REGISTRY COPYRIGHT 2002 ACS

RN 332103-65-8 REGISTRY

CN 7H-Purine-7-propanenitrile, 1,2,3,6-tetrahydro-3-methyl-8-(4-methyl-1-piperazinyl)-2,6-dioxo- (9CI) (CA INDEX NAME)

FS 3D CONCORD

MF C14 H19 N7 O2

SR Chemical Library

LC STN Files: CHEMCATS

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L5 ANSWER 59 OF 168 REGISTRY COPYRIGHT 2002 ACS

RN 332103-64-7 REGISTRY

CN 1H-Purine-2,6-dione, 3,7-dihydro-3-methyl-7-(3-methyl-2-butenyl)-8-(4-methyl-1-piperazinyl)- (9CI) (CA INDEX NAME)

FS 3D CONCORD

MF C16 H24 N6 O2

SR Chemical Library

LC STN Files: CHEMCATS

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L5 ANSWER 60 OF 168 REGISTRY COPYRIGHT 2002 ACS

RN 332103-62-5 REGISTRY

CN 1H-Purine-2,6-dione, 7-[(3-bromophenyl)methyl]-3,7-dihydro-1,3-dimethyl-8-(4-methyl-1-piperazinyl)- (9CI) (CA INDEX NAME)

FS 3D CONCORD

MF C19 H23 Br N6 O2

SR Chemical Library

- L5 ANSWER 61 OF 168 REGISTRY COPYRIGHT 2002 ACS
- RN 332103-61-4 REGISTRY
- CN 1H-Purine-2,6-dione, 3,7-dihydro-7-[2-hydroxy-3-(4-nitrophenoxy)propyl]-1,3-dimethyl-8-(4-methyl-1-piperazinyl)- (9CI) (CA INDEX NAME)
- FS 3D CONCORD
- MF C21 H27 N7 O6
- SR Chemical Library
- LC STN Files: CHEMCATS

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

- L5 ANSWER 62 OF 168 REGISTRY COPYRIGHT 2002 ACS
- RN 332103-60-3 REGISTRY
- CN 1H-Purine-2,6-dione, 7-[(4-chlorophenyl)methyl]-3,7-dihydro-1,3-dimethyl-8-(4-methyl-1-piperazinyl)- (9CI) (CA INDEX NAME)
- FS 3D CONCORD
- MF C19 H23 C1 N6 O2
- SR Chemical Library
- LC STN Files: CHEMCATS

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L5 ANSWER 63 OF 168 REGISTRY COPYRIGHT 2002 ACS

RN 332103-59-0 REGISTRY

CN 1H-Purine-2,6-dione, 3,7-dihydro-3-methyl-8-(4-methyl-1-piperazinyl)-7-(2-phenylethyl)- (9CI) (CA INDEX NAME)

FS 3D CONCORD

MF C19 H24 N6 O2

SR Chemical Library

LC STN Files: CHEMCATS

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L5 ANSWER 64 OF 168 REGISTRY COPYRIGHT 2002 ACS

RN 332103-58-9 REGISTRY

CN 1H-Purine-2,6-dione, 3,7-dihydro-3-methyl-8-(4-methyl-1-piperazinyl)-7-(1-methylpropyl)- (9CI) (CA INDEX NAME)

FS 3D CONCORD

MF C15 H24 N6 O2

SR Chemical Library

LC STN Files: CHEMCATS

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L5 ANSWER 65 OF 168 REGISTRY COPYRIGHT 2002 ACS

RN 332103-57-8 REGISTRY

CN 1H-Purine-2,6-dione, 3,7-dihydro-3-methyl-8-(4-methyl-1-piperazinyl)-7-(phenylmethyl)- (9CI) (CA INDEX NAME)

FS 3D CONCORD

MF C18 H22 N6 O2

SR Chemical Library

L5 ANSWER 66 OF 168 REGISTRY COPYRIGHT 2002 ACS

RN 332103-56-7 REGISTRY

CN 1H-Purine-2,6-dione, 7-[3-(2,4-dichlorophenoxy)-2-hydroxypropyl]-3,7-dihydro-3-methyl-8-(4-methyl-1-piperazinyl)- (9CI) (CA INDEX NAME)

FS 3D CONCORD

MF C20 H24 C12 N6 O4

SR Chemical Library

LC STN Files: CHEMCATS

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

- L5 ANSWER 67 OF 168 REGISTRY COPYRIGHT 2002 ACS
- RN 332103-55-6 REGISTRY
- CN 1H-Purine-2,6-dione, 3,7-dihydro-7-[2-hydroxy-3-(4-nitrophenoxy)propyl]-3-methyl-8-(4-methyl-1-piperazinyl)- (9CI) (CA INDEX NAME)
- FS 3D CONCORD
- MF C20 H25 N7 O6
- SR Chemical Library
- LC STN Files: CHEMCATS

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L5 ANSWER 68 OF 168 REGISTRY COPYRIGHT 2002 ACS

RN 332103-54-5 REGISTRY

CN 1H-Purine-2,6-dione, 3,7-dihydro-7-[2-hydroxy-3-(2-methylphenoxy)propyl]-3-methyl-8-(4-methyl-1-piperazinyl)- (9CI) (CA INDEX NAME)

FS 3D CONCORD

MF C21 H28 N6 O4

SR Chemical Library

LC STN Files: CHEMCATS

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L5 ANSWER 69 OF 168 REGISTRY COPYRIGHT 2002 ACS

RN 332103-53-4 REGISTRY

CN 1H-Purine-2,6-dione, 3,7-dihydro-7-(2-hydroxy-3-phenoxypropyl)-3-methyl-8-(4-methyl-1-piperazinyl)- (9CI) (CA INDEX NAME)

FS 3D CONCORD

MF C20 H26 N6 O4

SR Chemical Library

LC STN Files: CHEMCATS

Me Me N OH
$$CH_2-CH-CH_2-OPh$$

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L5 ANSWER 70 OF 168 REGISTRY COPYRIGHT 2002 ACS

RN 332103-52-3 REGISTRY

CN 1H-Purine-2,6-dione, 3,7-dihydro-3-methyl-7-[(4-methylphenyl)methyl]-8-(4-methyl-1-piperazinyl)- (9CI) (CA INDEX NAME)

FS 3D CONCORD

MF C19 H24 N6 O2

SR Chemical Library

L5 ANSWER 71 OF 168 REGISTRY COPYRIGHT 2002 ACS

RN 332098-98-3 REGISTRY

CN 1H-Purine-2,6-dione, 3,7-dihydro-3-methyl-8-(4-methyl-1-piperazinyl)-7-(2-methyl-2-propenyl)- (9CI) (CA INDEX NAME)

FS 3D CONCORD

MF C15 H22 N6 O2

SR Chemical Library

LC STN Files: CHEMCATS

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L5 ANSWER 72 OF 168 REGISTRY COPYRIGHT 2002 ACS

RN 332098-96-1 REGISTRY

CN 1H-Purine-2,6-dione, 3,7-dihydro-3-methyl-7-(2-methyl-2-propenyl)-8-(1-piperazinyl)- (9CI) (CA INDEX NAME)

FS 3D CONCORD

MF C14 H20 N6 O2

SR Chemical Library

LC STN Files: CHEMCATS

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L5 ANSWER 73 OF 168 REGISTRY COPYRIGHT 2002 ACS

RN 332033-44-0 REGISTRY

CN 1H-Purine-2,6-dione, 3,7-dihydro-3-methyl-8-(4-methyl-1-piperazinyl)-7-(3-phenylpropyl)- (9CI) (CA INDEX NAME)

FS 3D CONCORD

MF C20 H26 N6 O2

SR Chemical Library

LC STN Files: CHEMCATS

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L5 ANSWER 74 OF 168 REGISTRY COPYRIGHT 2002 ACS

RN 331841-51-1 REGISTRY

CN 1H-Purine-2,6-dione, 7-[(2-chlorophenyl)methyl]-3,7-dihydro-3-methyl-8-(1-piperazinyl)- (9CI) (CA INDEX NAME)

MF C17 H19 C1 N6 O2

SR Chemical Library

LC STN Files: CHEMCATS

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L5 ANSWER 75 OF 168 REGISTRY COPYRIGHT 2002 ACS

RN 331671-66-0 REGISTRY

CN 1H-Purine-2,6-dione, 3,7-dihydro-1,3-dimethyl-7-(1-methylethyl)-8-(1-piperazinyl)- (9CI) (CA INDEX NAME)

FS 3D CONCORD

MF C14 H22 N6 O2

SR Chemical Library

ANSWER 76 OF 168 REGISTRY COPYRIGHT 2002 ACS L5

RN 331671-64-8 REGISTRY

1H-Purine-2, 6-dione, 7-[2-(4-chlorophenyl)-2-oxoethyl]-3,7-dihydro-1,3-CN

dimethyl-8-(1-piperazinyl)- (9CI) (CA INDEX NAME)

3D CONCORD FS

C19 H21 C1 N6 O3 MF

SR Chemical Library

LC STN Files: CHEMCATS

$$\begin{array}{c|c} Me \\ \hline \\ O \\ N \\ N \\ \hline \\ N \\ \hline \\ N \\ CH_2 - C \\ \end{array}$$

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L5 ANSWER 77 OF 168 REGISTRY COPYRIGHT 2002 ACS

330202-50-1 REGISTRY RN

1H-Purine-2,6-dione, 3,7-dihydro-7-(2-methoxyethyl)-3-methyl-8-(4-methyl-1-CN piperazinyl) - (9CI) (CA INDEX NAME)

3D CONCORD FS

MF C14 H22 N6 O3

SR Chemical Library

LC STN Files: CHEMCATS

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L5 ANSWER 78 OF 168 REGISTRY COPYRIGHT 2002 ACS

RN 330202-48-7 REGISTRY

CN 1H-Purine-2,6-dione, 7-(2-butenyl)-3,7-dihydro-3-methyl-8-(4-methyl-1-piperazinyl)- (9CI) (CA INDEX NAME)

FS 3D CONCORD

MF C15 H22 N6 O2

SR Chemical Library

LC STN Files: CHEMCATS

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L5 ANSWER 79 OF 168 REGISTRY COPYRIGHT 2002 ACS

RN 329702-29-6 REGISTRY

CN 1H-Purine-2,6-dione, 3,7-dihydro-3-methyl-7-nonyl-8-(1-piperazinyl)- (9CI) (CA INDEX NAME)

FS 3D CONCORD

MF C19 H32 N6 O2

SR Chemical Library

LC STN Files: CHEMCATS

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L5 ANSWER 80 OF 168 REGISTRY COPYRIGHT 2002 ACS

RN 318271-92-0 REGISTRY

CN lH-Purine-2,6-dione, 3,7-dihydro-3-methyl-7-[(4-nitrophenyl)methyl]-8-(1-piperazinyl)- (9CI) (CA INDEX NAME)

FS 3D CONCORD

MF C17 H19 N7 O4

SR Chemical Library

L5 ANSWER 81 OF 168 REGISTRY COPYRIGHT 2002 ACS

RN 313554-09-5 REGISTRY

CN 1H-Purine-2,6-dione, 3,7-dihydro-3-methyl-8-(1-piperazinyl)-7-propyl-(9CI) (CA INDEX NAME)

FS 3D CONCORD

MF C13 H20 N6 O2

SR Chemical Library

LC STN Files: CHEMCATS

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L5 ANSWER 82 OF 168 REGISTRY COPYRIGHT 2002 ACS

RN 313530-91-5 REGISTRY

CN 1H-Purine-2,6-dione, 3,7-dihydro-3-methyl-7-pentyl-8-(1-piperazinyl)-(9CI) (CA INDEX NAME)

FS 3D CONCORD

MF C15 H24 N6 O2

SR Chemical Library

LC STN Files: CHEMCATS

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L5 ANSWER 83 OF 168 REGISTRY COPYRIGHT 2002 ACS

RN 313530-90-4 REGISTRY

CN 1H-Purine-2,6-dione, 3,7-dihydro-3-methyl-7-(3-methylbutyl)-8-(1-piperazinyl)- (9CI) (CA INDEX NAME)

FS 3D CONCORD

MF C15 H24 N6 O2

SR Chemical Library

LC STN Files: CHEMCATS

$$\begin{array}{c|c}
Me \\
N \\
N \\
N
\end{array}$$

$$\begin{array}{c|c}
NH \\
N \\
CH_2-CH_2-CHMe_2
\end{array}$$

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L5 ANSWER 84 OF 168 REGISTRY COPYRIGHT 2002 ACS

RN 313471-57-7 REGISTRY

CN 1H-Purine-2,6-dione, 3,7-dihydro-1,3-dimethyl-8-(4-methyl-1-piperazinyl)-7-(2-oxo-2-phenylethyl)- (9CI) (CA INDEX NAME)

FS 3D CONCORD

MF C20 H24 N6 O3

SR Chemical Library

LC STN Files: CHEMCATS

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L5 ANSWER 85 OF 168 REGISTRY COPYRIGHT 2002 ACS

RN 313471-56-6 REGISTRY

CN 1H-Purine-2,6-dione, 7-heptyl-3,7-dihydro-3-methyl-8-(4-methyl-1-piperazinyl)- (9CI) (CA INDEX NAME)

FS 3D CONCORD

MF C18 H30 N6 O2

SR Chemical Library

L5 ANSWER 86 OF 168 REGISTRY COPYRIGHT 2002 ACS

RN 313471-55-5 REGISTRY

CN 1H-Purine-2,6-dione, 7-[(4-chlorophenyl)methyl]-3,7-dihydro-3-methyl-8-(4-methyl-1-piperazinyl)- (9CI) (CA INDEX NAME)

FS 3D CONCORD

MF C18 H21 C1 N6 O2

SR Chemical Library

LC STN Files: CHEMCATS

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

- L5 ANSWER 87 OF 168 REGISTRY COPYRIGHT 2002 ACS
- RN 313471-54-4 REGISTRY
- CN 1H-Purine-2,6-dione, 7-[(3-bromophenyl)methyl]-3,7-dihydro-3-methyl-8-(4-methyl-1-piperazinyl)- (9CI) (CA INDEX NAME)
- FS 3D CONCORD
- MF C18 H21 Br N6 O2
- SR Chemical Library
- LC STN Files: CHEMCATS

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L5 ANSWER 88 OF 168 REGISTRY COPYRIGHT 2002 ACS

RN 313471-53-3 REGISTRY

CN 1H-Purine-2,6-dione, 3,7-dihydro-3-methyl-8-(4-methyl-1-piperazinyl)-7-(2-methylpropyl)- (9CI) (CA INDEX NAME)

FS 3D CONCORD

MF C15 H24 N6 O2

SR Chemical Library

LC STN Files: CHEMCATS

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L5 ANSWER 89 OF 168 REGISTRY COPYRIGHT 2002 ACS

RN 313471-52-2 REGISTRY

CN 1H-Purine-2,6-dione, 7-butyl-3,7-dihydro-3-methyl-8-(4-methyl-1-piperazinyl)- (9CI) (CA INDEX NAME)

FS 3D CONCORD

MF C15 H24 N6 O2

SR Chemical Library

LC STN Files: CHEMCATS

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L5 ANSWER 90 OF 168 REGISTRY COPYRIGHT 2002 ACS

RN 313471-50-0 REGISTRY

CN lH-Purine-2,6-dione, 3,7-dihydro-3-methyl-8-(4-methyl-1-piperazinyl)-7-propyl- (9CI) (CA INDEX NAME)

FS 3D CONCORD

MF C14 H22 N6 O2

SR Chemical Library

LC STN Files: CHEMCATS

L5 ANSWER 91 OF 168 REGISTRY COPYRIGHT 2002 ACS

RN 313471-49-7 REGISTRY

CN 1H-Purine-2,6-dione, 7-ethyl-3,7-dihydro-3-methyl-8-(4-methyl-1-piperazinyl)- (9CI) (CA INDEX NAME)

FS 3D CONCORD

MF C13 H20 N6 O2

SR Chemical Library

LC STN Files: CHEMCATS

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L5 ANSWER 92 OF 168 REGISTRY COPYRIGHT 2002 ACS

RN 313404-89-6 REGISTRY

CN 1H-Purine-2,6-dione, 3,7-dihydro-3-methyl-8-(4-methyl-1-piperazinyl)-7-[2-(4-nitrophenyl)-2-oxoethyl]- (9CI) (CA INDEX NAME)

FS 3D CONCORD

MF C19 H21 N7 O5

SR Chemical Library

LC STN Files: CHEMCATS

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L5 ANSWER 93 OF 168 REGISTRY COPYRIGHT 2002 ACS

RN 313404-88-5 REGISTRY

CN 1H-Purine-2,6-dione, 7-[2-(4-bromophenyl)-2-oxoethyl]-3,7-dihydro-3-methyl-8-(4-methyl-1-piperazinyl)- (9CI) (CA INDEX NAME)

FS 3D CONCORD

MF C19 H21 Br N6 O3

SR Chemical Library

LC STN Files: CHEMCATS

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L5 ANSWER 94 OF 168 REGISTRY COPYRIGHT 2002 ACS

RN 313404-64-7 REGISTRY

CN 1H-Purine-2,6-dione, 7-[2-(4-chlorophenyl)-2-oxoethyl]-3,7-dihydro-3-methyl-8-(4-methyl-1-piperazinyl)- (9CI) (CA INDEX NAME)

FS 3D CONCORD

MF C19 H21 C1 N6 O3

SR Chemical Library

LC STN Files: CHEMCATS

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L5 ANSWER 95 OF 168 REGISTRY COPYRIGHT 2002 ACS

RN 313403-94-0 REGISTRY

CN 1H-Purine-2,6-dione, 3,7-dihydro-7-[2-hydroxy-3-(1-methylethoxy)propyl]-3-methyl-8-(4-methyl-1-piperazinyl)- (9CI) (CA INDEX NAME)

FS 3D CONCORD

MF C17 H28 N6 O4

SR Chemical Library

LC STN Files: CHEMCATS

L5 ANSWER 96 OF 168 REGISTRY COPYRIGHT 2002 ACS

RN 313396-00-8 REGISTRY

CN 1H-Purine-2,6-dione, 3,7-dihydro-7-[2-hydroxy-3-(2-methylphenoxy)propyl]-3-methyl-8-(1-piperazinyl)- (9CI) (CA INDEX NAME)

FS 3D CONCORD

MF C20 H26 N6 O4

SR Chemical Library

LC STN Files: CHEMCATS

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

- L5 ANSWER 97 OF 168 REGISTRY COPYRIGHT 2002 ACS
- RN 313274-01-0 REGISTRY
- CN 1H-Purine-2,6-dione, 7-[(3-bromophenyl)methyl]-3,7-dihydro-1,3-dimethyl-8-(1-piperazinyl)- (9CI) (CA INDEX NAME)
- FS 3D CONCORD
- MF C18 H21 Br N6 O2
- SR Chemical Library
- LC STN Files: CHEMCATS

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L5 ANSWER 98 OF 168 REGISTRY COPYRIGHT 2002 ACS

RN 313274-00-9 REGISTRY

CN 1H-Purine-2,6-dione, 7-[(3-bromophenyl)methyl]-3,7-dihydro-3-methyl-8-(1-piperazinyl)- (9CI) (CA INDEX NAME)

FS 3D CONCORD

MF C17 H19 Br N6 O2

SR Chemical Library

LC STN Files: CHEMCATS

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L5 ANSWER 99 OF 168 REGISTRY COPYRIGHT 2002 ACS

RN 313273-71-1 REGISTRY

CN 1H-Purine-2,6-dione, 3,7-dihydro-3-methyl-7-(2-methylpropyl)-8-(1-piperazinyl)- (9CI) (CA INDEX NAME)

FS 3D CONCORD

MF C14 H22 N6 O2

SR Chemical Library

LC STN Files: CHEMCATS

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L5 ANSWER 100 OF 168 REGISTRY COPYRIGHT 2002 ACS

RN 313255-35-5 REGISTRY

CN 1H-Purine-2,6-dione, 7-butyl-3,7-dihydro-3-methyl-8-(1-piperazinyl)- (9CI) (CA INDEX NAME)

FS 3D CONCORD

MF C14 H22 N6 O2

SR Chemical Library

LC STN Files: CHEMCATS

L5 ANSWER 101 OF 168 REGISTRY COPYRIGHT 2002 ACS

RN 313230-36-3 REGISTRY

CN 1H-Purine-2,6-dione, 3,7-dihydro-3-methyl-8-(1-piperazinyl)-7-(2-propenyl)-(9CI) (CA INDEX NAME)

FS 3D CONCORD

MF C13 H18 N6 O2

SR Chemical Library

LC STN Files: CHEMCATS

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L5 ANSWER 102 OF 168 REGISTRY COPYRIGHT 2002 ACS

RN 312915-48-3 REGISTRY

CN 1H-Purine-2,6-dione, 3,7-dihydro-7-[2-hydroxy-3-(4-methoxyphenoxy)propyl]-3-methyl-8-(1-piperazinyl)- (9CI) (CA INDEX NAME)

FS 3D CONCORD

MF C20 H26 N6 O5

SR Chemical Library

LC STN Files: CHEMCATS

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L5 ANSWER 103 OF 168 REGISTRY COPYRIGHT 2002 ACS

RN 309938-17-8 REGISTRY

CN 1H-Purine-2,6-dione, 3,7-dihydro-1,3-dimethyl-8-(4-methyl-1-piperazinyl)-7-(1-naphthalenylmethyl)- (9CI) (CA INDEX NAME)

FS 3D CONCORD

MF C23 H26 N6 O2

SR Chemical Library

LC STN Files: CHEMCATS

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L5 ANSWER 104 OF 168 REGISTRY COPYRIGHT 2002 ACS

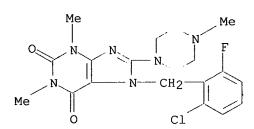
RN 309937-99-3 REGISTRY

CN 1H-Purine-2,6-dione, 7-[(2-chloro-6-fluorophenyl)methyl]-3,7-dihydro-1,3-dimethyl-8-(4-methyl-1-piperazinyl)- (9CI) (CA INDEX NAME)

MF C19 H22 C1 F N6 O2

SR Chemical Library

LC STN Files: CHEMCATS



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L5 ANSWER 105 OF 168 REGISTRY COPYRIGHT 2002 ACS

RN 309937-43-7 REGISTRY

CN 1H-Purine-2,6-dione, 7-[(3-fluorophenyl)methyl]-3,7-dihydro-1,3-dimethyl-8-(4-methyl-1-piperazinyl)- (9CI) (CA INDEX NAME)

FS 3D CONCORD

MF C19 H23 F N6 O2

SR Chemical Library

LC STN Files: CHEMCATS

- L5 ANSWER 106 OF 168 REGISTRY COPYRIGHT 2002 ACS
- RN 304876-71-9 REGISTRY
- CN 1H-Purine-2,6-dione, 7-hexadecyl-3,7-dihydro-3-methyl-8-(1-piperazinyl)-(9CI) (CA INDEX NAME)
- FS 3D CONCORD
- MF C26 H46 N6 O2
- SR Chemical Library
- LC STN Files: CHEMCATS

$$\begin{array}{c|c} Me & NH \\ \hline N & NH \\ \hline N & NH \\ \hline N & (CH_2)_{15}-Me \end{array}$$

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

- L5 ANSWER 107 OF 168 REGISTRY COPYRIGHT 2002 ACS
- RN 303973-85-5 REGISTRY
- CN 1H-Purine-2,6-dione, 7-(2-butenyl)-3,7-dihydro-3-methyl-8-(1-piperazinyl)- (9CI) (CA INDEX NAME)
- FS 3D CONCORD
- MF C14 H20 N6 O2
- SR Chemical Library
- LC STN Files: CHEMCATS

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L5 ANSWER 108 OF 168 REGISTRY COPYRIGHT 2002 ACS

RN 303973-23-1 REGISTRY

CN 1H-Purine-2,6-dione, 3,7-dihydro-3-methyl-7-[(3-methylphenyl)methyl]-8-(1-piperazinyl)- (9CI) (CA INDEX NAME)

FS 3D CONCORD

MF C18 H22 N6 O2

SR Chemical Library

LC STN Files: CHEMCATS

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L5 ANSWER 109 OF 168 REGISTRY COPYRIGHT 2002 ACS

RN 303972-96-5 REGISTRY

CN 1H-Purine-2,6-dione, 3,7-dihydro-3-methyl-1,7-bis(phenylmethyl)-8-(1-piperazinyl)- (9CI) (CA INDEX NAME)

FS 3D CONCORD

MF C24 H26 N6 O2

SR Chemical Library

LC STN Files: CHEMCATS

$$\begin{array}{c|c} Me & NH \\ \hline N & N & NH \\ \hline N & NH \\ N & NH \\ \hline N & NH \\ \hline$$

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L5 ANSWER 110 OF 168 REGISTRY COPYRIGHT 2002 ACS

RN 303971-30-4 REGISTRY

CN 1H-Purine-2,6-dione, 7-[(4-chlorophenyl)methyl]-3,7-dihydro-3-methyl-8-(1-piperazinyl)- (9CI) (CA INDEX NAME)

FS 3D CONCORD

MF C17 H19 C1 N6 O2

SR Chemical Library

LC STN Files: CHEMCATS

- L5 ANSWER 111 OF 168 REGISTRY COPYRIGHT 2002 ACS
- RN 302942-21-8 REGISTRY
- CN 7H-Purine-7-acetic acid, 8-bromo-1,2,3,6-tetrahydro-3-methyl-2,6-dioxo-, compd. with 3,7-dihydro-3-methyl-7-(phenylmethyl)-8-(1-piperazinyl)-1H-purine-2,6-dione (1:1) (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

- CN 1H-Purine-2,6-dione, 3,7-dihydro-3-methyl-7-(phenylmethyl)-8-(1-piperazinyl)-, mono(8-bromo-1,2,3,6-tetrahydro-3-methyl-2,6-dioxo-7H-purine-7-acetate) (9CI)
- MF C17 H20 N6 O2 . C8 H7 Br N4 O4
- SR Chemical Library
- LC STN Files: CHEMCATS

CM 1

CRN 299419-33-3 CMF C17 H20 N6 O2

CM 2

CRN 107608-69-5 CMF C8 H7 Br N4 O4

L5 ANSWER 112 OF 168 REGISTRY COPYRIGHT 2002 ACS RN 302903-96-4 REGISTRY

CN Benzoic acid, 4-hydroxy-3-methoxy-, compd. with 3,7-dihydro-7-(2-hydroxyethyl)-3-methyl-8-(4-methyl-1-piperazinyl)-1H-purine-2,6-dione (1:1) (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN 1H-Purine-2,6-dione, 3,7-dihydro-7-(2-hydroxyethyl)-3-methyl-8-(4-methyl-1-piperazinyl)-, mono(4-hydroxy-3-methoxybenzoate) (salt) (9CI)

MF C13 H20 N6 O3 . C8 H8 O4

SR Chemical Library

LC STN Files: CHEMCATS

CM 1

CRN 302903-95-3 CMF C13 H20 N6 O3

Me Me N N N
$$\sim$$
 CH₂-CH₂-OH

CM 2

CRN 121-34-6 CMF C8 H8 O4

L5 ANSWER 113 OF 168 REGISTRY COPYRIGHT 2002 ACS

RN 302903-95-3 REGISTRY

CN 1H-Purine-2,6-dione, 3,7-dihydro-7-(2-hydroxyethyl)-3-methyl-8-(4-methyl-1-piperazinyl)- (9CI) (CA INDEX NAME)

FS 3D CONCORD

MF C13 H20 N6 O3

CI COM

SR Chemical Library

LC STN Files: CHEMCATS

Me Me N N N
$$\sim$$
 CH₂-CH₂-OH

L5 ANSWER 114 OF 168 REGISTRY COPYRIGHT 2002 ACS

RN 302800-67-5 REGISTRY

CN 1H-Purine-2,6-dione, 3,7-dihydro-3-methyl-7-(1-methylethyl)-8-(1-piperazinyl)- (9CI) (CA INDEX NAME)

FS 3D CONCORD

MF C13 H20 N6 O2

SR Chemical Library

LC STN Files: CHEMCATS

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

- L5 ANSWER 115 OF 168 REGISTRY COPYRIGHT 2002 ACS
- RN 302785-79-1 REGISTRY
- CN 1H-Purine-2,6-dione, 3,7-dihydro-1,3-dimethyl-8-(4-methyl-1-piperazinyl)-7-(phenylmethyl)- (9CI) (CA INDEX NAME)
- FS 3D CONCORD
- MF C19 H24 N6 O2
- SR Chemical Library
- LC STN Files: CHEMCATS

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L5 ANSWER 116 OF 168 REGISTRY COPYRIGHT 2002 ACS
RN 302778-39-8 REGISTRY
CN 1H-Purine-2,6-dione, 3,7-dihydro-7-(2-hydroxyethyl)-3-methyl-8-(1-piperazinyl)-, (2E)-2-butenedioate (1:1) (salt) (9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF C12 H18 N6 O3 . C4 H4 O4

CM 1

SR

LC

CRN 302777-00-0 CMF C12 H18 N6 O3

Chemical Library

STN Files: CHEMCATS

CM 2

CRN 110-17-8 CMF C4 H4 O4

Double bond geometry as shown.

L5 ANSWER 117 OF 168 REGISTRY COPYRIGHT 2002 ACS

RN 302777-12-4 REGISTRY

CN Benzoic acid, 2-hydroxy-, compd. with 3,7-dihydro-7-(2-hydroxyethyl)-3-methyl-8-(1-piperazinyl)-1H-purine-2,6-dione (1:1) (9CI) (CA INDEX NAME) OTHER CA INDEX NAMES:

CN 1H-Purine-2,6-dione, 3,7-dihydro-7-(2-hydroxyethyl)-3-methyl-8-(1-piperazinyl)-, mono(2-hydroxybenzoate) (salt) (9CI)

MF C12 H18 N6 O3 . C7 H6 O3

SR Chemical Library

LC STN Files: CHEMCATS

CM 1

CRN 302777-00-0 CMF C12 H18 N6 O3

CM 2

CRN 69-72-7 CMF C7 H6 O3

L5 ANSWER 118 OF 168 REGISTRY COPYRIGHT 2002 ACS

RN 302777-11-3 REGISTRY

CN Butanedioic acid, hydroxy-, compd. with 3,7-dihydro-3-methyl-7-(1-phenylethyl)-8-(1-piperazinyl)-1H-purine-2,6-dione (1:1) (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN 1H-Purine-2,6-dione, 3,7-dihydro-3-methyl-7-(1-phenylethyl)-8-(1-piperazinyl)-, hydroxybutanedioate (1:1) (9CI)

MF C18 H22 N6 O2 . C4 H6 O5

SR Chemical Library

LC STN Files: CHEMCATS

CM 1

CRN 302777-10-2 CMF C18 H22 N6 O2

CM 2

CRN 6915-15-7 CMF C4 H6 O5

L5 ANSWER 119 OF 168 REGISTRY COPYRIGHT 2002 ACS

RN 302777-10-2 REGISTRY

CN 1H-Purine-2,6-dione, 3,7-dihydro-3-methyl-7-(1-phenylethyl)-8-(1-piperazinyl)- (9CI) (CA INDEX NAME)

FS 3D CONCORD

MF C18 H22 N6 O2

CI COM

SR Chemical Library

LC STN Files: CHEMCATS

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L5 ANSWER 120 OF 168 REGISTRY COPYRIGHT 2002 ACS

RN 302777-01-1 REGISTRY

CN 1H-1,2,4-Triazole-3-carboxylic acid, 5-amino-, compd. with 3,7-dihydro-7-(2-hydroxyethyl)-3-methyl-8-(1-piperazinyl)-1H-purine-2,6-dione (1:1) (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN 1H-Purine-2,6-dione, 3,7-dihydro-7-(2-hydroxyethyl)-3-methyl-8-(1-piperazinyl)-, 5-amino-1H-1,2,4-triazole-3-carboxylate (1:1) (salt) (9CI)

MF C12 H18 N6 O3 . C3 H4 N4 O2

SR Chemical Library

LC STN Files: CHEMCATS

CM 1

CRN 302777-00-0 CMF C12 H18 N6 O3

CM 2

CRN 3641-13-2 CMF C3 H4 N4 O2

L5 ANSWER 121 OF 168 REGISTRY COPYRIGHT 2002 ACS

RN 302777-00-0 REGISTRY

CN 1H-Purine-2,6-dione, 3,7-dihydro-7-(2-hydroxyethyl)-3-methyl-8-(1-piperazinyl)- (9CI) (CA INDEX NAME)

FS 3D CONCORD

MF C12 H18 N6 O3

CI COM

SR Chemical Library

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L5 ANSWER 122 OF 168 REGISTRY COPYRIGHT 2002 ACS

RN 302590-35-8 REGISTRY

CN Butanedioic acid, hydroxy-, compd. with 3,7-dihydro-3-methyl-7-(1-methylethyl)-8-(4-methyl-1-piperazinyl)-1H-purine-2,6-dione (1:1) (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN 1H-Purine-2,6-dione, 3,7-dihydro-3-methyl-7-(1-methylethyl)-8-(4-methyl-1-piperazinyl)-, hydroxybutanedioate (1:1) (9CI)

MF C14 H22 N6 O2 . C4 H6 O5

SR Chemical Library

LC STN Files: CHEMCATS

CM 1

CRN 302590-34-7 CMF C14 H22 N6 O2

CM 2

CRN 6915-15-7 CMF C4 H6 O5

L5 ANSWER 123 OF 168 REGISTRY COPYRIGHT 2002 ACS

RN 302590-34-7 REGISTRY

CN 1H-Purine-2,6-dione, 3,7-dihydro-3-methyl-7-(1-methylethyl)-8-(4-methyl-1-piperazinyl)- (9CI) (CA INDEX NAME)

FS 3D CONCORD

MF C14 H22 N6 O2

CI COM

SR Chemical Library

LC STN Files: CHEMCATS

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L5 ANSWER 124 OF 168 REGISTRY COPYRIGHT 2002 ACS

RN 300591-60-0 REGISTRY

CN 1H-Purine-2,6-dione, 3,7-dihydro-3,7-dimethyl-8-(4-methyl-1-piperazinyl)-1-(phenylmethyl)- (9CI) (CA INDEX NAME)

FS 3D CONCORD

MF C19 H24 N6 O2

SR Chemical Library

LC STN Files: CHEMCATS

L5 ANSWER 125 OF 168 REGISTRY COPYRIGHT 2002 ACS

RN 300391-56-4 REGISTRY

CN 1H-Purine-2,6-dione, 7-ethyl-3,7-dihydro-3-methyl-8-(1-piperazinyl)- (9CI) (CA INDEX NAME)

FS 3D CONCORD

MF C12 H18 N6 O2

SR Chemical Library

LC STN Files: CHEMCATS

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L5 ANSWER 126 OF 168 REGISTRY COPYRIGHT 2002 ACS

RN 299421-57-1 REGISTRY

CN 1H-Purine-2,6-dione, 3,7-dihydro-3-methyl-8-(1-piperazinyl)-1,7-dipropyl-(9CI) (CA INDEX NAME)

FS 3D CONCORD

MF C16 H26 N6 O2

SR Chemical Library

LC STN Files: CHEMCATS

$$\begin{array}{c|c}
N & N & N \\
N & N & N
\end{array}$$

$$\begin{array}{c|c}
NH & N & NH \\
N & N & NH
\end{array}$$

$$\begin{array}{c|c}
NH & NH & NH \\
NH & NH & NH
\end{array}$$

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L5 ANSWER 127 OF 168 REGISTRY COPYRIGHT 2002 ACS

RN 299419-33-3 REGISTRY

CN 1H-Purine-2,6-dione, 3,7-dihydro-3-methyl-7-(phenylmethyl)-8-(1-piperazinyl)- (9CI) (CA INDEX NAME)

FS 3D CONCORD

MF C17 H20 N6 O2

CI COM

SR Chemical Library

LC STN Files: CHEMCATS

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L5 ANSWER 128 OF 168 REGISTRY COPYRIGHT 2002 ACS

RN 122776-37-8 REGISTRY

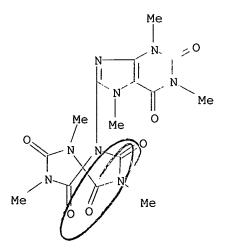
CN 1,3,6,8-Tetraazaspiro[4.4]nonane-2,4,7,9-tetrone, 1,3,8-trimethyl-6-(2,3,6,7-tetrahydro-1,3,7-trimethyl-2,6-dioxo-1H-purin-8-yl)-(9CI) (CA INDEX NAME)

FS 3D CONCORD

MF C16 H18 N8 O6

SR CA

LC STN Files: BEILSTEIN*, CA, CAPLUS, CASREACT (*File contains numerically searchable property data)



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1967 TO DATE)
1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 111:153495 Addition of electrophilic radicals to caffeine:

synthetic aspects and influence of the peroxidic initiators. Zylber, J.; Ouazzani-Chahdi, L.; Lefort, D.; Chiaroni, A.; Riche, C. (Lab. Electrochim. Catal. Synth. Org., CNRS, Thiais, 94320, Fr.). Tetrahedron, 45(3), 721-32 (English) 1989. CODEN: TETRAB. ISSN: 0040-4020.

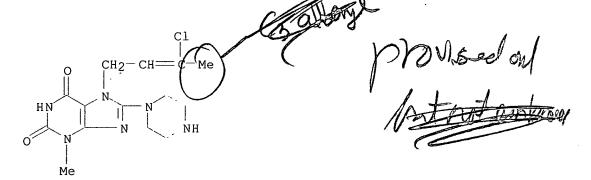
GI

Electrophilic radicals, such as .bul.CHRCO2Me(R = H, Me, CO2Me) and AB .bul.CCl3 radical were added directly at C-8 of, the model purine compd., caffeine to give 8-substituted derivs. in fairly good yields. The unexpected reaction of caffeine with oxy radicals from the initiators (BzO.bul., Me3COO.bul.) gave C-5 substituted 1,3,7-trimethyl-5,7dihydrouric acid derivs. and spirodihydantoin adduct I, whose crystal structure is reported.

- ANSWER 129 OF 168 REGISTRY COPYRIGHT 2002 ACS L5
- RN 106939-29-1 REGISTRY

Ι

- 1H-Purine-2,6-dione, 7-(3-chloro-2-butenyl)-3,7-dihydro-3-methyl-8-(1-CN piperazinyl) - (9CI) (CA INDEX NAME)
- FS 3D CONCORD
- C14 H19 C1 N6 O2 MF
- SR CA
- CA, CAPLUS, CASREACT, CHEMCATS, TOXCENTER, TOXLIT LC STN Files:



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

- 1 REFERENCES IN FILE CA (1967 TO DATE)
- 1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 106:95577 Synthesis and biological activity of 3-methyl, 7- or 8-alkyl-, 7,8-dialkyl, heterocyclic, and cyclohexylaminoxanthines. Romanenko, N. I.; Fedulova, I. V.; Primenko, B. O.; Orestenko, L. P. (Zaporozh. Med. Inst., Zaporozhe, USSR). Farm. Zh. (Kiev) (5), 41-4 (Ukranian) 1986. CODEN: FRZKAP. ISSN: 0367-3057.

GI

- AB Seventeen title compds. (I; R1 = heptyl, nonyl, or CH2CH:C(Cl)Me; R2 = NMe2, NEt2, piperidino, cyclohexylamino, NHCH2Ph, piperazino, morpholino, NHNH2, N(CH2CH2OH)2, etc.) were prepd. by reacting the K salt of 8-bromo-3-methylxanthine with appropriate alkyl halides followed by condensation with appropriate primary or secondary amines. Toxicity studies in mice showed I to be less toxic than aminazine. Most I exhibited diuretic activity in rats, and some exhibited analeptic activity as well. Many I exhibited antimicrobial activity in vitro against both bacteria and fungi. The most active diuretics contained morpholino, piperidino, or N-benzyl groups at the 8-position.
- L5 ANSWER 130 OF 168 REGISTRY COPYRIGHT 2002 ACS
- RN 106939-21-3 REGISTRY
- CN 1H-Purine-2,6-dione, 7-heptyl-3,7-dihydro-3-methyl-8-(1-piperazinyl)-(9CI) (CA INDEX NAME)
- FS 3D CONCORD
- MF C17 H28 N6 O2
- SR CA
- LC STN Files: CA, CAPLUS, CASREACT, CHEMCATS, TOXCENTER, TOXLIT

1 REFERENCES IN FILE CA (1967 TO DATE)
1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 106:95577 Synthesis and biological activity of 3-methyl, 7- or 8-alkyl-, 7,8-dialkyl, heterocyclic, and cyclohexylaminoxanthines.
Romanenko, N. I.; Fedulova, I. V.; Primenko, B. O.; Orestenko, L. P. (Zaporozh. Med. Inst., Zaporozhe, USSR). Farm. Zh. (Kiev) (5), 41-4 (Ukranian) 1986. CODEN: FRZKAP. ISSN: 0367-3057.

GI

AB Seventeen title compds. (I; R1 = heptyl, nonyl, or CH2CH:C(Cl)Me; R2 = NMe2, NEt2, piperidino, cyclohexylamino, NHCH2Ph, piperazino, morpholino, NHNH2, N(CH2CH2OH)2, etc.) were prepd. by reacting the K salt of 8-bromo-3-methylxanthine with appropriate alkyl halides followed by condensation with appropriate primary or secondary amines. Toxicity studies in mice showed I to be less toxic than aminazine. Most I exhibited diuretic activity in rats, and some exhibited analeptic activity as well. Many I exhibited antimicrobial activity in vitro against both bacteria and fungi. The most active diuretics contained morpholino, piperidino, or N-benzyl groups at the 8-position.

L5 ANSWER 131 OF 168 REGISTRY COPYRIGHT 2002 ACS

RN 105522-62-1 REGISTRY

CN 1H-Purine-2,6-dione, 3,7-dihydro-7-[2-hydroxy-2-(4-nitrophenyl)ethyl]-3-methyl-8-(1-piperazinyl)-, monohydrochloride (9CI) (CA INDEX NAME)

MF C18 H21 N7 O5 . C1 H

SR CA

● HCl

1 REFERENCES IN FILE CA (1967 TO DATE)
1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 105:226150 Synthesis, neurotropic and diuretic activity of 7,8-disubstituted 3-methylxanthines. Samura, B. A.; Fedulova, I. V.; Romanenko, B. A.; Priimenko, B. A.; Chervinskii, A. Yu.; Garmash, S. N.; Troshin, D. A. (Zaporozh. Med. Inst., Zaporozh, USSR). Khim.-Farm. Zh., 20(1), 52-5 (Russian) 1986. CODEN: KHFZAN. ISSN: 0023-1134.

The title compds. I (R = Ph, CH2OPh, CH(OH)C6H4NO2-p, R1 = 2-furylmethylamino, morpholino, hexamethylenimino, NHCH2CH2OH, NEt2, piperazino, SCH2CO2H), useful as psychotropics and diuretics, were prepd. in 24-94% yields from I (R1 = Br) by amination with appropriate amines or by reaction with HSCH2CO2H. The hydrochloride of I [R = CH(OH)C6H4NO2-p, R1 = piperazino] increased urinary flow 180.7% compared to a control and potentiated narcotic sleep 147.0% compared to a control.

L5 ANSWER 132 OF 168 REGISTRY COPYRIGHT 2002 ACS

RN 105522-61-0 REGISTRY

CN 1H-Purine-2,6-dione, 3,7-dihydro-7-[2-hydroxy-2-(4-nitrophenyl)ethyl]-3-methyl-8-(1-piperazinyl)- (9CI) (CA INDEX NAME)

FS 3D CONCORD

MF C18 H21 N7 O5

CI COM

SR CA

LC STN Files: CA, CAPLUS, CASREACT

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1967 TO DATE)
1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 105:226150 Synthesis, neurotropic and diuretic activity of 7,8-disubstituted 3-methylxanthines. Samura, B. A.; Fedulova, I. V.; Romanenko, B. A.; Priimenko, B. A.; Chervinskii, A. Yu.; Garmash, S. N.; Troshin, D. A. (Zaporozh. Med. Inst., Zaporozh, USSR). Khim.-Farm. Zh., 20(1), 52-5 (Russian) 1986. CODEN: KHFZAN. ISSN: 0023-1134.

The title compds. I (R = Ph, CH2OPh, CH(OH)C6H4NO2-p, R1 = 2-furylmethylamino, morpholino, hexamethylenimino, NHCH2CH2OH, NEt2, piperazino, SCH2CO2H), useful as psychotropics and diuretics, were prepd. in 24-94% yields from I (R1 = Br) by amination with appropriate amines or by reaction with HSCH2CO2H. The hydrochloride of I [R = CH(OH)C6H4NO2-p, R1 = piperazino] increased urinary flow 180.7% compared to a control and potentiated narcotic sleep 147.0% compared to a control.

L5 ANSWER 133 OF 168 REGISTRY COPYRIGHT 2002 ACS

RN 97725-83-2 REGISTRY

CN Theophylline, 8-(4-methyl-1-piperazinyl)-7-(2-propynyl)- (7CI) (CA INDEX NAME)

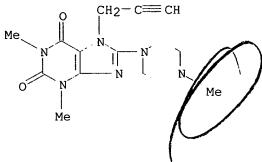
FS 3D CONCORD

MF C15 H20 N6 O2

SR CAOLD

LC STN Files: BEILSTEIN*, CAOLD

(*File contains numerically searchable property data)



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

L5 ANSWER 134 OF 168 REGISTRY COPYRIGHT 2002 ACS

RN 97490-51-2 REGISTRY

CN Theophylline, 7-acetonyl-8-(4-methyl-1-piperazinyl)-, hydrochloride (7CI) (CA INDEX NAME)

MF C15 H22 N6 O3 . \times Cl H

SR CAOLD

LC STN Files: CAOLD

CRN (743-53-3)

●x HCl

1 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

L5 ANSWER 135 OF 168 REGISTRY COPYRIGHT 2002 ACS

RN 96987-48-3 REGISTRY

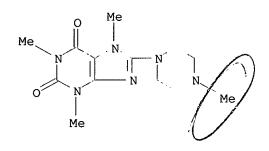
CN Caffeine, 8-(4-methyl-1-piperazinyl)-, methobromide (7CI) (CA INDEX NAME)

MF C13 H20 N6 O2 . C H3 Br

LC STN Files: CAOLD

CM 1

CRN 96294-94-9 CMF C13 H20 N6 O2



CM 2

CRN 74-83-9 CMF C H3 Br

Br-CH3

1 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

L5 ANSWER 136 OF 168 REGISTRY COPYRIGHT 2002 ACS

RN 96986-88-8 REGISTRY

CN Caffeine, 8-(4-methyl-1-piperazinyl)-, methiodide (7CI) (CA INDEX NAME)

MF C13 H20 N6 O2 . C H3 I

LC STN Files: CAOLD

CM 1

CRN 96294-94-9 CMF C13 H20 N6 O2

CM 2

CRN 74-88-4 CMF C H3 I

H3C-I

1 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

L5 ANSWER 137 OF 168 REGISTRY COPYRIGHT 2002 ACS

RN 96294-95-0 REGISTRY

CN Caffeine, 8-(4-methyl-1-piperazinyl)-, hydrochloride (6CI, 7CI) (CA INDEX NAME)

MF C13 H20 N6 O2 . \times C1 H

LC STN Files: BEILSTEIN*, CAOLD

(*File contains numerically searchable property data)

CRN (96294-94-9)

•x HCl

2 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

L5 ANSWER 138 OF 168 REGISTRY COPYRIGHT 2002 ACS

RN 96294-94-9 REGISTRY

CN Caffeine, 8-(4-methyl-1-piperazinyl)- (7CI) (CA INDEX NAME)

FS 3D CONCORD

MF C13 H20 N6 O2

CI COM

LC STN Files: BEILSTEIN*, CAOLD, CHEMCATS

(*File contains numerically searchable property data)

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

2 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

L5 ANSWER 139 OF 168 REGISTRY COPYRIGHT 2002 ACS

RN 87080-34-0 REGISTRY

CN 1H-Purine-2,6-dione, 7-[3-[bis(phenylmethyl)amino]-2-hydroxypropyl]-3,7-dihydro-1,3-dimethyl-8-(4-methyl-1-piperazinyl)- (9CI) (CA INDEX NAME)

FS 3D CONCORD

MF C29 H37 N7 O3

LC STN Files: CA, CAPLUS

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1967 TO DATE)
1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 99:139617 Synthesis and properties of 7- and 8-piperazinyl derivatives of theophylline. Gorczyca, Maria; Pawlowski, Maciej; Lucka-Sobstel, Barbara (Dep. Pharm. Chem., Sch. Med., Krakow, 31-065, Pol.). Acta Pol. Pharm., 39(5-6), 315-21 (Polish) 1982. CODEN: APPHAX. ISSN: 0001-6837.

GI

- AB Aminolysis of the oxazole ring in I (R = H, Cl) with an N-substituted piperazine yielded II (R = H, Cl; R1 = Me, CH2CH2OH). II (R = Cl) were treated with an amine in the presence of KOH to give II (R = PhCH2NH, R1 = Me, CH2CH2OH; R = 4-methyl-1-piperazinyl, R1 = Me). An analogous reaction of I (R = Cl) with PhCH2NH2 followed by reaction with an N-substituted piperazine gave III (R2 = CH2CH2OH, CO2Et, Ph). II and III are potential cardiovascular agents.
- L5 ANSWER 140 OF 168 REGISTRY COPYRIGHT 2002 ACS
- RN 87080-33-9 REGISTRY
- CN 1H-Purine-2,6-dione, 3,7-dihydro-7-[2-hydroxy-3-(4-methyl-1-piperazinyl)propyl]-1,3-dimethyl-8-(4-methyl-1-piperazinyl)- (9CI) (CA INDEX NAME)
- FS 3D CONCORD
- MF C20 H34 N8 O3
- LC STN Files: CA, CAPLUS

- **PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT**
 - 1 REFERENCES IN FILE CA (1967 TO DATE)
 - 1 REFERENCES IN FILE CAPLUS (1967 TO DATE)
- REFERENCE 1: 99:139617 Synthesis and properties of 7- and 8-piperazinyl derivatives of theophylline. Gorczyca, Maria; Pawlowski, Maciej; Lucka-Sobstel, Barbara (Dep. Pharm. Chem., Sch. Med., Krakow, 31-065, Pol.). Acta Pol. Pharm., 39(5-6), 315-21 (Polish) 1982. CODEN: APPHAX. ISSN: 0001-6837.

- AB Aminolysis of the oxazole ring in I (R = H, Cl) with an N-substituted piperazine yielded II (R = H, Cl; R1 = Me, CH2CH2OH). II (R = Cl) were treated with an amine in the presence of KOH to give II (R = PhCH2NH, R1 = Me, CH2CH2OH; R = 4-methyl-1-piperazinyl, R1 = Me). An analogous reaction of I (R = Cl) with PhCH2NH2 followed by reaction with an N-substituted piperazine gave III (R2 = CH2CH2OH, CO2Et, Ph). II and III are potential cardiovascular agents.
- L5 ANSWER 141 OF 168 REGISTRY COPYRIGHT 2002 ACS
- RN 87080-32-8 REGISTRY
- CN 1H-Purine-2,6-dione, 3,7-dihydro-7-(2-hydroxypropyl)-1,3-dimethyl-8-(4-methyl-1-piperazinyl)- (9CI) (CA INDEX NAME)
- FS 3D CONCORD
- MF C15 H24 N6 O3
- LC STN Files: CA, CAPLUS

- **PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT**
 - 1 REFERENCES IN FILE CA (1967 TO DATE)
 1 REFERENCES IN FILE CAPLUS (1967 TO DATE)
- REFERENCE 1: 99:139617 Synthesis and properties of 7- and 8-piperazinyl derivatives of theophylline. Gorczyca, Maria; Pawlowski, Maciej; Lucka-Sobstel, Barbara (Dep. Pharm. Chem., Sch. Med., Krakow, 31-065, Pol.). Acta Pol. Pharm., 39(5-6), 315-21 (Polish) 1982. CODEN: APPHAX. ISSN: 0001-6837.

AB Aminolysis of the oxazole ring in I (R = H, Cl) with an N-substituted piperazine yielded II (R = H, Cl; Rl = Me, CH2CH2OH). II (R = Cl) were treated with an amine in the presence of KOH to give II (R = PhCH2NH, Rl = Me, CH2CH2OH; R = 4-methyl-1-piperazinyl, Rl = Me). An analogous reaction of I (R = Cl) with PhCH2NH2 followed by reaction with an N-substituted piperazine gave III (R2 = CH2CH2OH, CO2Et, Ph). II and III are potential cardiovascular agents.

- L5 ANSWER 142 OF 168 REGISTRY COPYRIGHT 2002 ACS
- RN 87080-28-2 REGISTRY
- CN 1H-Purine-2,6-dione, 7-(3-chloro-2-hydroxypropyl)-3,7-dihydro-1,3-dimethyl-8-(4-methyl-1-piperazinyl)- (9CI) (CA INDEX NAME)
- FS 3D CONCORD
- MF C15 H23 C1 N6 O3
- LC STN Files: CA, CAPLUS

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1967 TO DATE)
1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 99:139617 Synthesis and properties of 7- and 8-piperazinyl derivatives of theophylline. Gorczyca, Maria; Pawlowski, Maciej; Lucka-Sobstel, Barbara (Dep. Pharm. Chem., Sch. Med., Krakow, 31-065, Pol.). Acta Pol. Pharm., 39(5-6), 315-21 (Polish) 1982. CODEN: APPHAX. ISSN: 0001-6837.

- Aminolysis of the oxazole ring in I (R = H, Cl) with an N-substituted piperazine yielded II (R = H, Cl; Rl = Me, CH2CH2OH). II (R = Cl) were treated with an amine in the presence of KOH to give II (R = PhCH2NH, Rl = Me, CH2CH2OH; R = 4-methyl-1-piperazinyl, Rl = Me). An analogous reaction of I (R = Cl) with PhCH2NH2 followed by reaction with an N-substituted piperazine gave III (R2 = CH2CH2OH, CO2Et, Ph). II and III are potential cardiovascular agents.
- L5 ANSWER 143 OF 168 REGISTRY COPYRIGHT 2002 ACS
- RN 74039-61-5 REGISTRY
- CN 1H-Purine-2,6-dione, 3,7-dihydro-1,3-dimethyl-7-(2-oxopropyl)-8-(1-piperazinyl)-, hydrochloride (9CI) (CA INDEX NAME).
- MF C14 H20 N6 O3 . \times C1 H
- LC STN Files: RTECS*

(*File contains numerically searchable property data)

CRN (24961-80-6)

$$\begin{array}{c|c} & & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & &$$

●x HCl

- L5 ANSWER 144 OF 168 REGISTRY COPYRIGHT 2002 ACS
- RN 69408-23-7 REGISTRY
- CN 1H-Purine-2,6-dione, 3,7-dihydro-1-[2-hydroxy-3-(1-piperazinyl)propyl]-3,7-dimethyl-8-(1-piperazinyl)-, trihydrochloride (9CI) (CA INDEX NAME)
- MF C18 H30 N8 O3 . 3 C1 H
- LC STN Files: BEILSTEIN*, CA, CAPLUS

(*File contains numerically searchable property data)

●3 HCl

1 REFERENCES IN FILE CA (1967 TO DATE)
1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 90:103924 Piperazine derivatives of dimethylxanthines. VI. Reactions of 1-(2,3-epoxy)propyl-8-bromotheobromine with piperazines. Zejc, Alfred; Kiec-Kononowicz, Katarzyna; Pawlowski, Maciej (Sch. Med., Dep. Pharm. Chem., Krakow, Pol.). Acta Pol. Pharm., 35(4), 417-21 (Polish) 1978. CODEN: APPHAX. ISSN: 0001-6837.

GI

AB The title deriv. of theobromine refluxed in PrOH with N-aryl and N-alkyl derivs. of piperazine gave I (R = Ph, PhCH2, 4-ClC6H4, 4-MeC6H4, Me, HOCH2CH2, EtO2C (II)]. On heating with concd. HCl, II underwent hydrolysis and decarboxylation to yield I (R = H). All yields were almost quant; I were synthesized as potential diuretics, spasmolytics, antihistaminics, and cardiostimulants.

L5 ANSWER 145 OF 168 REGISTRY COPYRIGHT 2002 ACS

RN 69408-16-8 REGISTRY

CN 1H-Purine-2,6-dione, 3,7-dihydro-1-[2-hydroxy-3-(4-methyl-1-piperazinyl)propyl]-3,7-dimethyl-8-(4-methyl-1-piperazinyl)-, ethanedioate (1:3) (salt) (9CI) (CA INDEX NAME)

MF C20 H34 N8 O3 . 3 C2 H2 O4

LC STN Files: BEILSTEIN*, CA, CAPLUS
(*File contains numerically searchable property data)

CM 1

CRN 69408-15-7 CMF C20 H34 N8 O3

CM 2

CRN 144-62-7 CMF C2 H2 O4

1 REFERENCES IN FILE CA (1967 TO DATE)
1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 90:103924 Piperazine derivatives of dimethylxanthines. VI. Reactions of 1-(2,3-epoxy)propyl-8-bromotheobromine with piperazines. Zejc, Alfred; Kiec-Kononowicz, Katarzyna; Pawlowski, Maciej (Sch. Med., Dep. Pharm. Chem., Krakow, Pol.). Acta Pol. Pharm., 35(4), 417-21 (Polish) 1978. CODEN: APPHAX. ISSN: 0001-6837.

GΙ

AB The title deriv. of theobromine refluxed in PrOH with N-aryl and N-alkyl derivs. of piperazine gave I (R = Ph, PhCH2, 4-ClC6H4, 4-MeC6H4, Me, HOCH2CH2, EtO2C (II)]. On heating with concd. HCl, II underwent hydrolysis and decarboxylation to yield I (R = H). All yields were almost quant; I were synthesized as potential diuretics, spasmolytics, antihistaminics, and cardiostimulants.

L5 ANSWER 146 OF 168 REGISTRY COPYRIGHT 2002 ACS

RN 69408-15-7 REGISTRY

CN 1H-Purine-2,6-dione, 3,7-dihydro-1-[2-hydroxy-3-(4-methyl-1-piperazinyl)propyl]-3,7-dimethyl-8-(4-methyl-1-piperazinyl)- (9CI) (CAINDEX NAME)

FS 3D CONCORD

MF C20 H34 N8 O3

CI COM

LC STN Files: BEILSTEIN*

(*File contains numerically searchable property data)

L5 ANSWER 147 OF 168 REGISTRY COPYRIGHT 2002 ACS

RN 67162-78-1 REGISTRY

CN 1H-Purine-2,6-dione, 1-[2-(acetyloxy)propyl]-3,7-dihydro-3,7-dimethyl-8-(4-methyl-1-piperazinyl)- (9CI) (CA INDEX NAME)

FS 3D CONCORD

MF C17 H26 N6 O4

LC STN Files: BEILSTEIN*, CA, CAPLUS

(*File contains numerically searchable property data)

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1967 TO DATE)
1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 89:109376 Piperazine derivatives of dimethylxanthines. V. Preparation and properties of 8-piperazino- and 1-.beta.-hydroxypropyl-8-piperazinotheobromines. Cygankiewicz, Andrzej; Gorczyca, Maria; Zejc, Alfred; Zimon, Romuald (Dep. Pharm. Chem., Sch. Med., Krakow, Pol.). Acta Pol. Pharm., 34(6), 607-12 (Polish) 1977. CODEN: APPHAX. ISSN: 0001-6837.

GI

8-Bromotheobromine and anhyd. piperazine heated in MeOCH2CH2OH gave 67% I (R1 = H). I [R1 = Me, CH2CH2OH, and CH2CH(OH)Me] were prepd. analogously in 68-72% yields. I heated in PrOH with 2,3-epoxypropane in presence of pyridine gave 48-75% II [R1 = H, Me, CH2CH(OH)Me], which were also obtained in the reaction of 1-(.beta.-hydroxypropyl)-8-bromotheobromine with the appropriately substituted piperazine. All I and II were characterized as HCl or HBr salts, and most of the hydroxylated I and II, also as the Ac derivs. I and II were synthesized as potential spasmolytics and antihistaminics.

L5 ANSWER 148 OF 168 REGISTRY COPYRIGHT 2002 ACS

RN 67162-77-0 REGISTRY

CN 1H-Purine-2,6-dione, 3,7-dihydro-1-(2-hydroxypropyl)-3,7-dimethyl-8-(4-methyl-1-piperazinyl)-, monohydrobromide (9CI) (CA INDEX NAME)

MF C15 H24 N6 O3 . Br H

LC STN Files: BEILSTEIN*, CA, CAPLUS

(*File contains numerically searchable property data)

CRN (67162-76-9)

• HBr

1 REFERENCES IN FILE CA (1967 TO DATE)
1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 89:109376 Piperazine derivatives of dimethylxanthines. V. Preparation and properties of 8-piperazino- and 1-.beta.-hydroxypropyl-8-piperazinotheobromines. Cygankiewicz, Andrzej; Gorczyca, Maria; Zejc, Alfred; Zimon, Romuald (Dep. Pharm. Chem., Sch. Med., Krakow, Pol.). Acta Pol. Pharm., 34(6), 607-12 (Polish) 1977. CODEN: APPHAX. ISSN: 0001-6837.

GI

AB 8-Bromotheobromine and anhyd. piperazine heated in MeOCH2CH2OH gave 67% I (R1 = H). I [R1 = Me, CH2CH2OH, and CH2CH(OH)Me] were prepd. analogously in 68-72% yields. I heated in PrOH with 2,3-epoxypropane in presence of pyridine gave 48-75% II [R1 = H, Me, CH2CH(OH)Me], which were also

obtained in the reaction of 1-(.beta.-hydroxypropyl)-8-bromotheobromine with the appropriately substituted piperazine. All I and II were characterized as HCl or HBr salts, and most of the hydroxylated I and II, also as the Ac derivs. I and II were synthesized as potential spasmolytics and antihistaminics.

L5 ANSWER 149 OF 168 REGISTRY COPYRIGHT 2002 ACS

RN 67162-76-9 REGISTRY

CN 1H-Purine-2,6-dione, 3,7-dihydro-1-(2-hydroxypropyl)-3,7-dimethyl-8-(4-methyl-1-piperazinyl)- (9CI) (CA INDEX NAME)

FS 3D CONCORD

MF C15 H24 N6 O3

CI COM

LC STN Files: BEILSTEIN*, CA, CAPLUS
(*File contains numerically searchable property data)

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1967 TO DATE)
1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 89:109376 Piperazine derivatives of dimethylxanthines. V. Preparation and properties of 8-piperazino- and 1-.beta.-hydroxypropyl-8-piperazinotheobromines. Cygankiewicz, Andrzej; Gorczyca, Maria; Zejc, Alfred; Zimon, Romuald (Dep. Pharm. Chem., Sch. Med., Krakow, Pol.). Acta Pol. Pharm., 34(6), 607-12 (Polish) 1977. CODEN: APPHAX. ISSN: 0001-6837.

GI

8-Bromotheobromine and anhyd. piperazine heated in MeOCH2CH2OH gave 67% I (R1 = H). I [R1 = Me, CH2CH2OH, and CH2CH(OH)Me] were prepd. analogously in 68-72% yields. I heated in PrOH with 2,3-epoxypropane in presence of pyridine gave 48-75% II [R1 = H, Me, CH2CH(OH)Me], which were also obtained in the reaction of 1-(.beta.-hydroxypropyl)-8-bromotheobromine with the appropriately substituted piperazine. All I and II were characterized as HCl or HBr salts, and most of the hydroxylated I and II, also as the Ac derivs. I and II were synthesized as potential spasmolytics and antihistaminics.

L5 ANSWER 150 OF 168 REGISTRY COPYRIGHT 2002 ACS

RN 67162-75-8 REGISTRY

CN 1H-Purine-2,6-dione, 3,7-dihydro-1-(2-hydroxypropyl)-3,7-dimethyl-8-(1-piperazinyl)-, dihydrobromide (9CI) (CA INDEX NAME)

MF C14 H22 N6 O3 . 2 Br H

LC STN Files: CA, CAPLUS

CRN (67162-74-7)

•2 HBr

1 REFERENCES IN FILE CA (1967 TO DATE)
1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 89:109376 Piperazine derivatives of dimethylxanthines. V. Preparation and properties of 8-piperazino- and 1-.beta.-hydroxypropyl-8-piperazinotheobromines. Cygankiewicz, Andrzej; Gorczyca, Maria; Zejc, Alfred; Zimon, Romuald (Dep. Pharm. Chem., Sch. Med., Krakow, Pol.). Acta Pol. Pharm., 34(6), 607-12 (Polish) 1977. CODEN: APPHAX. ISSN: 0001-6837.

GΙ

8-Bromotheobromine and anhyd. piperazine heated in MeOCH2CH2OH gave 67% I (R1 = H). I [R1 = Me, CH2CH2OH, and CH2CH(OH)Me] were prepd. analogously in 68-72% yields. I heated in PrOH with 2,3-epoxypropane in presence of pyridine gave 48-75% II [R1 = H, Me, CH2CH(OH)Me], which were also obtained in the reaction of 1-(.beta.-hydroxypropyl)-8-bromotheobromine with the appropriately substituted piperazine. All I and II were characterized as HCl or HBr salts, and most of the hydroxylated I and II, also as the Ac derivs. I and II were synthesized as potential spasmolytics and antihistaminics.

L5 ANSWER 151 OF 168 REGISTRY COPYRIGHT 2002 ACS

RN 67162-74-7 REGISTRY

CN 1H-Purine-2,6-dione, 3,7-dihydro-1-(2-hydroxypropyl)-3,7-dimethyl-8-(1-piperazinyl)- (9CI) (CA INDEX NAME)

FS 3D CONCORD

MF C14 H22 N6 O3

CI COM

LC STN Files: BEILSTEIN*, CA, CAPLUS

(*File contains numerically searchable property data)

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1967 TO DATE)
1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 89:109376 Piperazine derivatives of dimethylxanthines. V. Preparation and properties of 8-piperazino- and 1-.beta.-hydroxypropyl-8-piperazinotheobromines. Cygankiewicz, Andrzej; Gorczyca, Maria; Zejc, Alfred; Zimon, Romuald (Dep. Pharm. Chem., Sch. Med., Krakow, Pol.). Acta Pol. Pharm., 34(6), 607-12 (Polish) 1977. CODEN: APPHAX. ISSN: 0001-6837.

GI

8-Bromotheobromine and anhyd. piperazine heated in MeOCH2CH2OH gave 67% I (R1 = H). I [R1 = Me, CH2CH2OH, and CH2CH(OH)Me] were prepd. analogously in 68-72% yields. I heated in PrOH with 2,3-epoxypropane in presence of pyridine gave 48-75% II [R1 = H, Me, CH2CH(OH)Me], which were also obtained in the reaction of 1-(.beta.-hydroxypropyl)-8-bromotheobromine with the appropriately substituted piperazine. All I and II were characterized as HCl or HBr salts, and most of the hydroxylated I and II, also as the Ac derivs. I and II were synthesized as potential spasmolytics and antihistaminics.

L5 ANSWER 152 OF 168 REGISTRY COPYRIGHT 2002 ACS

RN 67162-67-8 REGISTRY

CN 1H-Purine-2,6-dione, 3,7-dihydro-3,7-dimethyl-8-(4-methyl-1-piperazinyl)-, monohydrobromide (9CI) (CA INDEX NAME)

MF C12 H18 N6 O2 . Br H

LC STN Files: BEILSTEIN*, CA, CAPLUS

(*File contains numerically searchable property data)

CRN (67162~66-7)

● HBr

1 REFERENCES IN FILE CA (1967 TO DATE)
1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 89:109376 Piperazine derivatives of dimethylxanthines. V. Preparation and properties of 8-piperazino- and 1-.beta.-hydroxypropyl-8-piperazinotheobromines. Cygankiewicz, Andrzej; Gorczyca, Maria; Zejc, Alfred; Zimon, Romuald (Dep. Pharm. Chem., Sch. Med., Krakow, Pol.). Acta Pol. Pharm., 34(6), 607-12 (Polish) 1977. CODEN: APPHAX. ISSN: 0001-6837.

GΙ

8-Bromotheobromine and anhyd. piperazine heated in MeOCH2CH2OH gave 67% I (R1 = H). I [R1 = Me, CH2CH2OH, and CH2CH(OH)Me] were prepd. analogously in 68-72% yields. I heated in PrOH with 2,3-epoxypropane in presence of pyridine gave 48-75% II [R1 = H, Me, CH2CH(OH)Me], which were also obtained in the reaction of 1-(.beta.-hydroxypropyl)-8-bromotheobromine with the appropriately substituted piperazine. All I and II were characterized as HCl or HBr salts, and most of the hydroxylated I and II, also as the Ac derivs. I and II were synthesized as potential spasmolytics and antihistaminics.

L5 ANSWER 153 OF 168 REGISTRY COPYRIGHT 2002 ACS

RN 67162-66-7 REGISTRY

CN 1H-Purine-2,6-dione, 3,7-dihydro-3,7-dimethyl-8-(4-methyl-1-piperazinyl)-(9CI) (CA INDEX NAME)

FS 3D CONCORD

MF C12 H18 N6 O2

CI COM

LC STN Files: BEILSTEIN*, CA, CAPLUS, CHEMCATS
(*File contains numerically searchable property data)

1 REFERENCES IN FILE CA (1967 TO DATE) 1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 89:109376 Piperazine derivatives of dimethylxanthines. V. Preparation and properties of 8-piperazino- and 1-.beta.-hydroxypropyl-8piperazinotheobromines. Cygankiewicz, Andrzej; Gorczyca, Maria; Zejc, Alfred; Zimon, Romuald (Dep. Pharm. Chem., Sch. Med., Krakow, Pol.). Acta Pol. Pharm., 34(6), 607-12 (Polish) 1977. CODEN: APPHAX. ISSN: 0001-6837.

GI

AΒ 8-Bromotheobromine and anhyd. piperazine heated in MeOCH2CH2OH gave 67% I (R1 = H). I [R1 = Me, CH2CH2OH, and CH2CH(OH)Me] were prepd. analogously in 68-72% yields. I heated in PrOH with 2,3-epoxypropane in presence of pyridine gave 48-75% II [R1 = H, Me, CH2CH(OH)Me], which were also obtained in the reaction of 1-(.beta.-hydroxypropyl)-8-bromotheobromine with the appropriately substituted piperazine. All I and II were characterized as HCl or HBr salts, and most of the hydroxylated I and II, also as the Ac derivs. I and II were synthesized as potential spasmolytics and antihistaminics.

L5 ANSWER 154 OF 168 REGISTRY COPYRIGHT 2002 ACS

RN 67162-65-6 REGISTRY

CN 1H-Purine-2,6-dione, 3,7-dihydro-3,7-dimethyl-8-(1-piperazinyl)-, dihydrochloride (9CI) (CA INDEX NAME) C11 H16 N6 O2 . 2 Cl H

MF

LC STN Files: CA, CAPLUS

CRN (67162 - 64 - 5)

●2 HCl

1 REFERENCES IN FILE CA (1967 TO DATE)
1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 89:109376 Piperazine derivatives of dimethylxanthines. V. Preparation and properties of 8-piperazino- and 1-.beta.-hydroxypropyl-8-piperazinotheobromines. Cygankiewicz, Andrzej; Gorczyca, Maria; Zejc, Alfred; Zimon, Romuald (Dep. Pharm. Chem., Sch. Med., Krakow, Pol.). Acta Pol. Pharm., 34(6), 607-12 (Polish) 1977. CODEN: APPHAX. ISSN: 0001-6837.

GI

8-Bromotheobromine and anhyd. piperazine heated in MeOCH2CH2OH gave 67% I (R1 = H). I [R1 = Me, CH2CH2OH, and CH2CH(OH)Me] were prepd. analogously in 68-72% yields. I heated in PrOH with 2,3-epoxypropane in presence of pyridine gave 48-75% II [R1 = H, Me, CH2CH(OH)Me], which were also obtained in the reaction of 1-(.beta.-hydroxypropyl)-8-bromotheobromine with the appropriately substituted piperazine. All I and II were characterized as HCl or HBr salts, and most of the hydroxylated I and II, also as the Ac derivs. I and II were synthesized as potential spasmolytics and antihistaminics.

L5 ANSWER 155 OF 168 REGISTRY COPYRIGHT 2002 ACS

RN 67162-64-5 REGISTRY

CN 1H-Purine-2,6-dione, 3,7-dihydro-3,7-dimethyl-8-(1-piperazinyl)- (9CI) (CA INDEX NAME)

FS 3D CONCORD

MF C11 H16 N6 O2

CI COM

LC STN Files: BEILSTEIN*, CA, CAPLUS, CHEMCATS

(*File contains numerically searchable property data)

1 REFERENCES IN FILE CA (1967 TO DATE)
1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 89:109376 Piperazine derivatives of dimethylxanthines. V. Preparation and properties of 8-piperazino- and 1-.beta.-hydroxypropyl-8-piperazinotheobromines. Cygankiewicz, Andrzej; Gorczyca, Maria; Zejc, Alfred; Zimon, Romuald (Dep. Pharm. Chem., Sch. Med., Krakow, Pol.). Acta Pol. Pharm., 34(6), 607-12 (Polish) 1977. CODEN: APPHAX. ISSN: 0001-6837.

GI

8-Bromotheobromine and anhyd. piperazine heated in MeOCH2CH2OH gave 67% I (R1 = H). I [R1 = Me, CH2CH2OH, and CH2CH(OH)Me] were prepd. analogously in 68-72% yields. I heated in PrOH with 2,3-epoxypropane in presence of pyridine gave 48-75% II [R1 = H, Me, CH2CH(OH)Me], which were also obtained in the reaction of 1-(.beta.-hydroxypropyl)-8-bromotheobromine with the appropriately substituted piperazine. All I and II were characterized as HCl or HBr salts, and most of the hydroxylated I and II, also as the Ac derivs. I and II were synthesized as potential spasmolytics and antihistaminics.

L5 ANSWER 156 OF 168 REGISTRY COPYRIGHT 2002 ACS

RN 62164-84-5 REGISTRY

CN Benzoic acid, 3,4,5-trimethoxy-, 2-[2,3,6,7-tetrahydro-3,7-dimethyl-8-(4-methyl-1-piperazinyl)-2,6-dioxo-1H-purin-1-yl]ethyl ester (9CI) (CA INDEX NAME)

FS 3D CONCORD

MF C24 H32 N6 O7

CI COM

LC STN Files: BEILSTEIN*, CA, CAPLUS

(*File contains numerically searchable property data)

1 REFERENCES IN FILE CA (1967 TO DATE)
1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 86:139992 1,8-Disubstituted derivatives of theobromine and their pharmacological activity. Gutorov, L. A.; Ovcharova, I. M.; Golovchinskaya, E. S.; Muratov, M. A.; Kaminka, M. E.; Mashkovskii, M. D. (Vses. Nauchno-Issled. Khim.-Farm. Inst. im. Ordzhonikidze, Moscow, USSR). Khim.-Farm. Zh., 10(12), 61-4 (Russian) 1976. CODEN: KHFZAN.

GI

$$RN$$
 $R1$
 MeO
 $CO_2 (CH_2)_n^ MeO$
 MeO
 MeO

AB Theobromine derivs. I (R = II, R1 = Et2NCH2) were obtained in 68.5 and 71.7% yields by heating I (R = H) with chloroalkyl 3,4,5-trimethoxybenzoates. Analogous alkylation of I (R = H, R1 = C1) gave 70.4 and 42.2% I (R = II, R1 = C1) which were aminated by piperazine derivs. to give 78.2-84.5% I (R = II, R1 = 1-piperazinyl, 4-methyl-1-piperazinyl). Alkylation of the latter with C1(CH2)nOH (n = 2,3), and C1CH2CH(OH)CH2OH gave 40.5-70.4% of the hydroxyalkylpiperazinyl theobromine derivs. I were useful as broncholytics, vasodilators, and as antihypertensives.

- L5 ANSWER 157 OF 168 REGISTRY COPYRIGHT 2002 ACS
- RN 62128-72-7 REGISTRY
- CN Benzoic acid, 3,4,5-trimethoxy-, 3-[2,3,6,7-tetrahydro-3,7-dimethyl-2,6-dioxo-8-(1-piperazinyl)-1H-purin-1-yl]propyl ester (9CI) (CA INDEX NAME)
- FS 3D CONCORD
- MF C24 H32 N6 O7
- LC STN Files: BEILSTEIN*, CA, CAPLUS

 (*File contains numerically searchable property data)

1 REFERENCES IN FILE CA (1967 TO DATE)
1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 86:139992 1,8-Disubstituted derivatives of theobromine and their pharmacological activity. Gutorov, L. A.; Ovcharova, I. M.; Golovchinskaya, E. S.; Muratov, M. A.; Kaminka, M. E.; Mashkovskii, M. D. (Vses. Nauchno-Issled. Khim.-Farm. Inst. im. Ordzhonikidze, Moscow, USSR). Khim.-Farm. Zh., 10(12), 61-4 (Russian) 1976. CODEN: KHFZAN.

GΙ

MeO MeO
$$RN$$
 $R1$ MeO $CO_2 (CH_2)_n^ R1$ MeO $II, n=2,3$

Theobromine derivs. I (R = II, R1 = Et2NCH2) were obtained in 68.5 and 71.7% yields by heating I (R = H) with chloroalkyl 3,4,5-trimethoxybenzoates. Analogous alkylation of I (R = H, R1 = Cl) gave 70.4 and 42.2% I (R = II, R1 = Cl) which were aminated by piperazine derivs. to give 78.2-84.5% I (R = II, R1 = 1-piperazinyl, 4-methyl-1-piperazinyl). Alkylation of the latter with Cl(CH2)nOH (n = 2,3), and ClCH2CH(OH)CH2OH gave 40.5-70.4% of the hydroxyalkylpiperazinyl theobromine derivs. I were useful as broncholytics, vasodilators, and as antihypertensives.

- L5 ANSWER 158 OF 168 REGISTRY COPYRIGHT 2002 ACS
- RN 62128-71-6 REGISTRY
- CN Benzoic acid, 3,4,5-trimethoxy-, 2-[2,3,6,7-tetrahydro-3,7-dimethyl-8-(4-methyl-1-piperazinyl)-2,6-dioxo-1H-purin-1-yl]ethyl ester, monohydrochloride (9CI) (CA INDEX NAME)
- MF C24 H32 N6 O7 . C1 H
- LC STN Files: CA, CAPLUS
- CRN (62164-84-5)

HC1

1 REFERENCES IN FILE CA (1967 TO DATE)
1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 86:139992 1,8-Disubstituted derivatives of theobromine and their pharmacological activity. Gutorov, L. A.; Ovcharova, I. M.; Golovchinskaya, E. S.; Muratov, M. A.; Kaminka, M. E.; Mashkovskii, M. D. (Vses. Nauchno-Issled. Khim.-Farm. Inst. im. Ordzhonikidze, Moscow, USSR). Khim.-Farm. Zh., 10(12), 61-4 (Russian) 1976. CODEN: KHFZAN.

GΙ

MeO MeO
$$RN$$
 $R1$ MeO $CO_2 (CH_2)_n$ $R1$ MeO $II, n=2,3$

Theobromine derivs. I (R = II, R1 = Et2NCH2) were obtained in 68.5 and 71.7% yields by heating I (R = H) with chloroalkyl 3,4,5-trimethoxybenzoates. Analogous alkylation of I (R = H, R1 = Cl) gave 70.4 and 42.2% I (R = II, R1 = Cl) which were aminated by piperazine derivs. to give 78.2-84.5% I (R = II, R1 = 1-piperazinyl, 4-methyl-1-piperazinyl). Alkylation of the latter with Cl(CH2)nOH (n = 2,3), and ClCH2CH(OH)CH2OH gave 40.5-70.4% of the hydroxyalkylpiperazinyl theobromine derivs. I were useful as broncholytics, vasodilators, and as antihypertensives.

L5 ANSWER 159 OF 168 REGISTRY COPYRIGHT 2002 ACS

RN 62128-70-5 REGISTRY

CN Benzoic acid, 3,4,5-trimethoxy-, 2-[2,3,6,7-tetrahydro-3,7-dimethyl-2,6-dioxo-8-(1-piperazinyl)-1H-purin-1-yl]ethyl ester, monohydrochloride (9CI) (CA INDEX NAME)

MF C23 H30 N6 O7 . C1 H

LC STN Files: CA, CAPLUS, CHEMCATS

CRN (62128-69-2)

● HCl

1 REFERENCES IN FILE CA (1967 TO DATE)
1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 86:139992 1,8-Disubstituted derivatives of theobromine and their pharmacological activity. Gutorov, L. A.; Ovcharova, I. M.; Golovchinskaya, E. S.; Muratov, M. A.; Kaminka, M. E.; Mashkovskii, M. D. (Vses. Nauchno-Issled. Khim.-Farm. Inst. im. Ordzhonikidze, Moscow, USSR). Khim.-Farm. Zh., 10(12), 61-4 (Russian) 1976. CODEN: KHFZAN.

GI

MeO MeO
$$RN$$
 $R1$ MeO $CO_2 (CH_2)_n$ $R1$ MeO $II, n=2,3$

Theobromine derivs. I (R = II, R1 = Et2NCH2) were obtained in 68.5 and 71.7% yields by heating I (R = H) with chloroalkyl 3,4,5-trimethoxybenzoates. Analogous alkylation of I (R = H, R1 = Cl) gave 70.4 and 42.2% I (R = II, R1 = Cl) which were aminated by piperazine derivs. to give 78.2-84.5% I (R = II, R1 = 1-piperazinyl, 4-methyl-1-piperazinyl). Alkylation of the latter with Cl(CH2)nOH (n = 2,3), and ClCH2CH(OH)CH2OH gave 40.5-70.4% of the hydroxyalkylpiperazinyl theobromine derivs. I were useful as broncholytics, vasodilators, and as antihypertensives.

- L5 ANSWER 160 OF 168 REGISTRY COPYRIGHT 2002 ACS
- RN 62128-69-2 REGISTRY
- CN Benzoic acid, 3,4,5-trimethoxy-, 2-[2,3,6,7-tetrahydro-3,7-dimethyl-2,6-dioxo-8-(1-piperazinyl)-1H-purin-1-yl]ethyl ester (9CI) (CA INDEX NAME)
- FS 3D CONCORD
- MF C23 H30 N6 O7
- CI COM
- LC STN Files: BEILSTEIN*, CA, CAPLUS, CHEMCATS (*File contains numerically searchable property data)

1 REFERENCES IN FILE CA (1967 TO DATE)
1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 86:139992 1,8-Disubstituted derivatives of theobromine and their pharmacological activity. Gutorov, L. A.; Ovcharova, I. M.; Golovchinskaya, E. S.; Muratov, M. A.; Kaminka, M. E.; Mashkovskii, M. D. (Vses. Nauchno-Issled. Khim.-Farm. Inst. im. Ordzhonikidze, Moscow, USSR). Khim.-Farm. Zh., 10(12), 61-4 (Russian) 1976. CODEN: KHFZAN.

GI

MeO MeO
$$R1$$
 MeO $CO_2 (CH_2)_n^ R1$ MeO II , $n=2,3$

Theobromine derivs. I (R = II, R1 = Et2NCH2) were obtained in 68.5 and 71.7% yields by heating I (R = H) with chloroalkyl 3,4,5-trimethoxybenzoates. Analogous alkylation of I (R = H, R1 = Cl) gave 70.4 and 42.2% I (R = II, R1 = Cl) which were aminated by piperazine derivs. to give 78.2-84.5% I (R = II, R1 = 1-piperazinyl, 4-methyl-1-piperazinyl). Alkylation of the latter with Cl(CH2)nOH (n = 2,3), and ClCH2CH(OH)CH2OH gave 40.5-70.4% of the hydroxyalkylpiperazinyl theobromine derivs. I were useful as broncholytics, vasodilators, and as antihypertensives.

- L5 ANSWER 161 OF 168 REGISTRY COPYRIGHT 2002 ACS
- RN 52943-70-1 REGISTRY
- CN 7H-Purine-7-acetic acid, 1,2,3,6-tetrahydro-1,3-dimethyl-8-(4-methyl-1-piperazinyl)-2,6-dioxo-, ethyl ester (9CI) (CA INDEX NAME)
- FS 3D CONCORD
- MF C16 H24 N6 O4
- LC STN Files: BEILSTEIN*, CA, CAPLUS

 (*File contains numerically searchable property data)

1 REFERENCES IN FILE CA (1967 TO DATE)
1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 81:37537 Substitution derivatives of theophylline at the 7 and 8 positions. Lespagnol, Albert; Van Aerde, Christine (Lab. Pharm. Chim., Fac. Pharm., Lille, Fr.). C. R. Acad. Sci., Ser. C, 278(18), 1145-7 (French) 1974. CODEN: CHDCAQ.

GI For diagram(s), see printed CA Issue.

Theophyllines I [R = H, CH2CO2Et; R1 = [(3-phenothiazin-5-ylpropyl)amino], N-methylpiperazino, PhOCH2CH2NH, Ph2CHNH, (PhCH2)2N, PhCH2(PhCH2CH2)N] were prepd. by treating I (R1 = Br) with the amine. Reaction of I (R = CH2CO2Et, R1 = Br) with H2NCHPh2 also gave I (R = CH2CONHCHPh2, R1 = NHCHPh2). The reaction of I (R = H, R1 = Br) with pyridine gave the ylide II and hydrated derivs., both isolable. The phenothiazinylpropylamines III (R2 = H, C1, CF3, OMe; R3 = (CH2)3NH2) were prepd. by cyanoethylating III (R3 = H) and reducing the resulting III (R3 = CH2CH2CN).

L5 ANSWER 162 OF 168 REGISTRY COPYRIGHT 2002 ACS

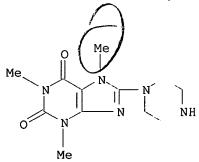
RN 50693-74-8 REGISTRY

CN 1H-Purine-2,6-dione, 3,7-dihydro-1,3,7-trimethyl-8-(1-piperazinyl)- (9CI) (CA INDEX NAME)

FS 3D CONCORD

MF C12 H18 N6 O2

LC STN Files: CA, CAPLUS, CASREACT, CHEMCATS



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

2 REFERENCES IN FILE CA (1967 TO DATE)
2 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 131:351159 Synthesis of 8-substituted xanthines and their oxidative skeleton rearrangement to 1-oxo-2,4,7,9-tetraazaspiro[4,5]dec-2-

ene-6,8,10-triones. Zimmer, Hans; Amer, Adel; Baumann, Frank M.; Haecker, Michael; Hess, Christopher G. M.; Ho, Douglas; Huber, Hans J.; Koch, Klaus; Mahnke, K.; Schumacher, Christian; Wingfield, Robert C. (Dep. Chemistry, Univ. Cincinnati, Cincinnati, OH, 45221, USA). Eur. J. Org. Chem. (9), 2419-2428 (English) 1999. CODEN: EJOCFK. ISSN: 1434-193X. Publisher: Wiley-VCH Verlag GmbH.

The synthesis of a no. of 8-(dialkylamino)xanthines- and 8-alkoxyxanthines AB is described. Treatment of 8-(dialkylamino)xanthines with 3-ClC6H4CO3H (m-CPBA) gave 3-(dialkylamino)-4,7,9-trimethyl-1-oxo-2,4,7,9-trimethyl-1-otetraazaspiro[4,5]dec-2-ene-6,8,10-triones by a novel rearrangement. Also, the corresponding 3-alkoxylated spiro compds. were obtained by an analogous treatment of 8-alkoxyxanthines. In attempts to elucidate a tentative mechanism for this rearrangement, 8-[(dialkylamino)methyl]caffeines on treatment with m-CPBA did not undergo the rearrangement but only yielded the expected N-oxides. This result seems to indicate that a necessary structure element for this rearrangement to occur is an atom with an unshared pair of electrons to be attached to the 8-position of the investigated xanthines. In agreement with this statement is the fact that N-oxides of 8-[(dialkylamino)methyl]caffeines do not undergo the novel rearrangement but rather give the expected Meisenheimer rearrangement or the Cope elimination depending upon reaction conditions.

REFERENCE 2: 80:3493 Antitussive oxazolinylpiperazines. Goebel, Axel; Schmitt, Karl; Linde-Ranke, Ida (Farbwerke Hoechst A.-G.). Ger. Offen. DE 2205815 19730816, 19 pp. (German). CODEN: GWXXBX. APPLICATION: DE 1972-2205815 19720208.

GI For diagram(s), see printed CA Issue.

AB Fifty-five piperazines [I; R = Bu, CH2CHMe2, CH2CO2Et, Ph, substituted phenyl, or a heterocyclic group, e.g. 2-pyridyl or 2-quinolyl; R1 = Me, CH2Cl, or CH:CH2, R2 and R3 = H or Me, or R2R3 = (CH2)3 or (CH2)6], useful as antitussives, were prepd. as hydrobromides by reaction of II with OCNCR1R2CHR3Br. I (R = 2-MeC6H4, R1-R3 = H) was prepd. by reaction of II (R = 2-MeC6H4) with OCNCH2CH2Cl or successively with COC12 and ethylenimine. I.HBr (R = 2,4-ClMeC6H3, R1 = Me, R2 = R3 = H) had LD50 560 mg/kg orally in mice and antitussive effect in 0.25 mg/kg doses i.v. in cats.

L5 ANSWER 163 OF 168 REGISTRY COPYRIGHT 2002 ACS

RN 25472-93-9 REGISTRY

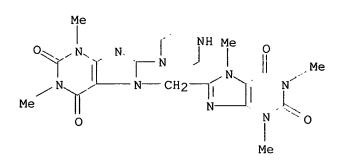
CN Caffeine, 8-[[1,2,3,6-tetrahydro-1,3-dimethyl-2,6-dioxo-8-(1-piperazinyl)purin-7-yl]methyl]- (8CI) (CA INDEX NAME)

FS 3D CONCORD

MF C20 H26 N10 O4

LC STN Files: BEILSTEIN*, CA, CAPLUS

(*File contains numerically searchable property data)





PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1967 TO DATE) 1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 72:55410 Synthesis of substituted bisxanthines. Kleine, K. H.; Graefe, Guenter; Haller, Rolf (Pharm. Inst., Univ. Freiburg/Br., Freiburg/Br., Ger.). Arzneim.-Forsch., 19(11), 1854-5 (German) 1969. CODEN: ARZNAD.

GI For diagram(s), see printed CA Issue.

I (R = Br) (3.3 millimoles) was treated with 33 millimoles piperidine in 15 ml EtOH 13 hr at 140-5.degree. to give 72% I (R = piperidino), m. 176-8.degree.. The following compds. were similarly prepd. (compd., R, % yield, and m.p. given): I, morpholino, 75, 208-10.degree.; I, NEt2, 86, 130-1.degree.; I, iso-PrNH, 88, 188-90.degree.; I, NHCH2CH2OH, 96, 219-21.degree.; II, piperidino, 99, 265-6.degree. (decompn.); II, 1-piperazinyl, 100, 250-2.degree. (decompn.); II, 4-(2-hydroxyethyl)-1-piperazinyl, 94, 279-80.degree.. I (R = Br) (4 g) was refluxed with 4.53 g NaSH in 120 ml 80% iso-PrOH 2 hr to give 69% I (R = SH), m. 190-2.degree. (decompn.), which on treatment with NaOAc-MeI gave 82% I (R = SMe), m. 258-9.degree.. I (R = SEt), m. 188-9.degree. (decompn.), was similarly prepd. in 72% yield.

L5 ANSWER 164 OF 168 REGISTRY COPYRIGHT 2002 ACS

RN 24961-90-8 REGISTRY

CN Theophylline, 7-acetonyl-8-(1-piperazinyl)-, monohydrochloride (8CI) (CA INDEX NAME)

MF C14 H20 N6 O3 . C1 H

LC STN Files: CA, CAPLUS, TOXCENTER, TOXLIT

CRN (24961-80-6)

HCl

1 REFERENCES IN FILE CA (1967 TO DATE)
1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 71:59504 Pharmacological studies of basic theophylline derivatives. II. Toxicity and effects on tracheal smooth muscle and histamine release. Kubota, Kazuhiko; Kono, Shigeharu; Koreeda, Tadako (Fac. Pharm. Sci., Sci. Univ. Tokyo, Tokyo, Japan). Yakugaku Zasshi, 89(4), 446-9 (Japanese) 1969. CODEN: YKKZAJ.

AB Theophylline derivs. (Kubota, et al., 1969) were evaluated for anti-histaminic effects on tracheal smooth muscles excised from guinea pigs. None of them exceeded theophylline in antihistaminic activity, but incorporation of the basic polar groups lowered the acute toxicity with min. loss of the activity. A theophylline deriv. with 7-acetonyl and 8-piperazino substituents exhibited a histamine-releasing action, as

examd. with rat mast cells and rat paw edema.

ANSWER 165 OF 168 REGISTRY COPYRIGHT 2002 ACS L5

RN 24961-80-6 REGISTRY

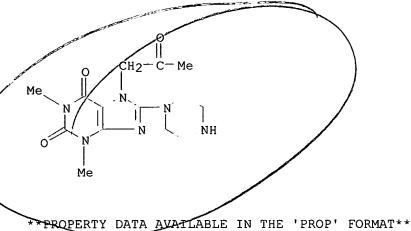
Theophylline, 7-acetonyl-8-(1-piperazinyl)- (8CI) (CA INDEX NAME) CN

FS 3D CONCORD

C14 H20 N6 O3 MF

CI COM

BEILSTEIN*, CA, CAPLUS, TOXLIT LC STN Files: (*File contains numerically searchable property data)



1 REFERENCES IN FILE CA (1967 TO DATE) 1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 71:59503 Pharmacological studies of basic theophylline derivatives. I. Effects on the cardiovascular system. Kubota, Kazuhiko; Kono, Shigeharu; Koreeda, Tadako (Fac. Pharm. Sci., Sci. Univ. Tokyo, Tokyo, Japan). Yakugaku Zasshi, 89(4), 441-5 (Japanese) 1969. CODEN: YKKZAJ.

GΙ For diagram(s), see printed CA Issue.

The following new theophylline (I) derivs. were evaluated for their cardiovascular effects on dogs (7- and 8-substituents and m.p. given): CH2CH2C(:NOH)NH2, H, 203-5.degree.; CH2C(:NOH)NH2, H, 227-30.degree.; CH2Ac, piperazino, 192.degree.; CH2Ac, morpholino, 167.degree.. Also tested were II (R, R1, and m.p. given): Bu, H, 93.degree.; Et, Et, 85.degree.; (RR1 =) piperidino, 158.degree.; (RR1 =) morpholino, 178.degree.; (RR1 =) pyrrolidino, 112.degree.; and III (R2 and m.p. given): piperidino, 202.degree.; Et2N, 160.degree. (IV). Most of the compds. increased the blood flow of renal, femoral, and internal carotid arteries, but the effect was of the order of that of I. IV, however, was 6-fold as effective in the internal carotid blood flow. In general, addn. of basic polar groups to I lessened the cardiovascular effects.

ANSWER 166 OF 168 REGISTRY COPYRIGHT 2002 ACS L5

RN 20367-10-6 REGISTRY

CN Benzoic acid, 3,4,5-trimethoxy-, ester with 7-(2-hydroxyethyl)-8-(1piperazinyl)theophylline (8CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN Theophylline, 7-(2-hydroxyethyl)-8-(1-piperazinyl)-, 3,4,5trimethoxybenzoate (ester)

FS 3D CONCORD

MF C23 H30 N6 O7

LC BEILSTEIN*, CA, CAPLUS, IFICDB, IFIPAT, IFIUDB STN Files: (*File contains numerically searchable property data)

1 REFERENCES IN FILE CA (1967 TO DATE) 1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 69:87022 Theophylline derivatives. Stachel, Adolf; Nitz, Rolf E.; Resag, Klaus; Kreiskott, Horst (Cassella Farbwerke Mainkur A.-G.). U.S. US 3399195 19680827, 4 pp. (English). CODEN: USXXAM. PRIORITY: DE 1967-C39516 19670628.

For diagram(s), see printed CA Issue. GI

The title compds. are effective coronary dilators and in addn. possess AΒ central nervous system depressor activity. They are prepd. by 3 different methods. Thus, a mixt. of 52 g. 8-bromotheophylline and 57.6 g. 3,4,5-(MeO)3C6H2(CH2)3Cl was stirred for 24 hrs. at 100.degree. while adding 27.6 g. K2CO3 in 150 cc. HCONMe2 to yield 100 g. 7-[3-(3,4,5-trimethoxybenzoxy)propyl]-8-bromotheophylline (I), m. 175.degree. (MePh). A soln. of 51 g. I in 250 cc. PhCl was mixed with 10.6 g. Na2CO3, a soln. of 13 g. N-(2-hydroxyethyl) piperazine in 100 cc. PhCl added dropwise at 50-60.degree. during 1 hr., and the mixt. stirred and refluxed for 12 hrs. to give 48 g. II [n = 3, A = (CH2)2, R =3,4,5-(MeO)3, X = OH] (III), m. 130.degree. (AcOEt) [HCl salt m. 204.degree. (decompn.)]. Also described are the following II (n, AX, R, and m.p. given): 3, (CH2)3OH, 3,4,5-(MeO)3, 150.degree.; 3, CH2CHMeOH, 3,4,5-(MeO)3, 147.degree.; 3, CH2CH(OH)CH2OMe, 3,4,5-(MeO)3, 129.degree.; 3, (CH2)4, 3,4,5-(MeO)3, 141.degree.; 2, CH2CH2OH, 3,4,5-(MeO)3, 140.degree.; 2, (CH2)3OH, 3,4,5-(MeO)3, 130.degree.; 2, CH2CHMeOH, 3,4,5-(MeO)3, 115.degree.; 2, (CH2)4OH, 3,4,5-(MeO)3, 128.degree.; 2, CH2CH(OH)CH2OMe, 3,4,5-(MeO)3, 106.degree.; 2, CH2CHMeOH, 3,5-(MeO)2, 168.degree.; 2, (CH2)3OH, 3,5-(MeO)2, 166.degree.; 3, (CH2)3OH, 4-OMe, 123.degree. To a mixt. of 28.7 g. III and 5.3 g. Na2CO3 in 200 cc. C6H6 was added at room temp. a soln. of 11.5 g. 3,4,5-(MeO) 3C6H2COC1 (IV) in 100 cc. C6H6, and the mixt. stirred for 1-2 hrs. and then refluxed for 3-4 $\,$ hrs. to yield 25 g. HCl salt of V [n = 3, A = (CH2)2, R1 = R2 = 3,4,5-(MeO)3], m. 231.degree. (decompn.). A mixt. of 40 g. piperazine, 16 g. Na2CO3, and 75.5 g. 7-[2-(3,4,5-trimethoxybenzoxy)ethyl]-8bromotheophylline in 300 cc. PhCl was refluxed for 24 hrs. to give II [n =2, AX = H, R = 3,4,5-(MeO)3] (VI), m. 167-9.degree. (AcOEt). A mixt. of 50.2 g. VI, 13.8 g. K2CO3, and 29 g. 3,4,5-(MeO)3C6H2CO2(CH2)3Cl in 200 cc. HCONMe2 was stirred for 12 hrs. at 100.degree. to yield 53 g. HCl salt of V $[n=2,\ A=(CH2)3,\ R1=R2=3,4,5-(MeO)3],\ m.\ 140-3.degree.$ (decompn.). A soln. of 46 g. IV in 100 cc. C6H6 was added dropwise to a soln. of 38 g. VII and 20.2 g. Et3N in 300 cc. C6H6, the reaction mixt. stirred for 3-4 hrs. at room temp. and refluxed for 2 hrs. to give 40 g. HCl salt of V [n = 3, A = CH2CHMe, R1 = R2 = 3,4,5-(MeO)3], m. 125.degree. (decompn.). Also described are the following V (n, A, R1, R2, and decompn. point of HCl salt given): 3, (CH2)3, 3,4,5-(MeO)3, 3,4,5-(MeO)3, 188.degree.; 3, CH2CH[O2CC6H2(OMe)3-3,4,5]CH2OMe, 3,4,5-(MeO)3, 3,4,5-(MeO)3, 95.degree.; 2, (CH2)2, 3,4,5-(MeO)3, 3,4,5-(MeO)3,

105.degree.; 2, (CH2)4, 3,4,5-(MeO)3, 3,4,5-(MeO)3, 165.degree.; 2, CH2CHMe, 3,5-(MeO)2, 3,4,5-(MeO)3, 115.degree.; 2, (CH2)3, 3,5-(MeO)2, 3,5-(MeO)2, 123.degree.; 3, (CH2)3, 4-MeO, 3,4,5-(MeO)3, 107.degree.; 3, (CH2)4, 3,4,5-(MeO)3, 3,4,5-(MeO)3, 123.degree.; 2, CH2CHMe, 3,4,5-(OMe)3, 115.degree.; 2, CH2CH[O2CC6H2(OMe) 3-3, 4, 5] CH2OMe, 3, 4, 5-(MeO) 3, 3,4,5-(MeO)3, 113.degree.. ANSWER 167 OF 168 REGISTRY COPYRIGHT 2002 ACS

L5

903-54-8 REGISTRY RN

Theophylline, 7-acetonyl-8-(4-methyl-1-piperazinyl)-, monohydrochloride CN (8CI) (CA INDEX NAME)

C15 H22 N6 O3 . C1 H MF

CAOLD STN Files: LC

(743 - 53 - 3)CRN

HC1

1 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

ANSWER 168 OF 168 REGISTRY COPYRIGHT 2002 ACS L5

743-53-3 REGISTRY RN

Theophylline, 7-acetonyl-8-(4-methyl-1-piperazinyl)- (7CI, 8CI) (CA INDEX CN NAME)

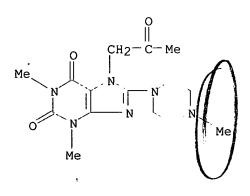
FS 3D CONCORD

C15 H22 N6 O3 MF

CI COM

LC STN Files: BEILSTEIN*, CAOLD

(*File contains numerically searchable property data)



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

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5 L5 L6

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ANSWER 1 OF 5 CAOLD COPYRIGHT 2002 ACS 1.6

AN CA62:9130d CAOLD

purine azides TΙ

Smirnova, N. B.; Postovskii, I. Ya. ΑU

903-54-8 910-46-3 IT 75-98-9 743-53-3 910-47-4 975-43-9 975-44-0 977-76-4 977-77-5 979-51-1 979-52-2 979-53-3 1051-14-5 1051-15-6 1051-26-9 7029-99-4 97407-31-3 **97490-51-2** 97790-68-6 98468-16-7 99888-39-8

ANSWER 2 OF 5 CAOLD COPYRIGHT 2002 ACS L6

ΑN

CA59:1658g CAOLD pyrazolo[2,3-a]pyrimidine derivs. ΤI

ΑU Takamizawa, Akira; Hayashi, S.

PA Shionogi & Co., Ltd.

DT Patent

> PATENT NO. KIND DATE

PΙ JP 62005191 1962

90090-71-4 90559-16-3 91337-94-9 97361-17-6 97619-27-7 IT **97725-83-2** 98147-52-5 98964-20-6 100412-13-3 101201-75-6 106571-85-1

L6 ANSWER 3 OF 5 CAOLD COPYRIGHT 2002 ACS

ΑN CA58:5670q CAOLD

ΤI caffeine-8-alkylene diamines

ΑU Klosa, Josef